

**CDM**

1073557 - R8 SDMS



# Libby Asbestos Site

Libby, Montana

Operable Unit 1 –  
Former Export Plant Site

August 27, 2007

Revision 1 Draft  
Final Data Summary Report

**Revision 1**  
**Draft Final Data Summary Report**  
**Operable Unit 1 - Former Export Plant Site**  
**Libby Asbestos Site**  
**Libby, Montana**

**August 27, 2007**

**Contract No. DTRT57-05-D-30109**  
**Task Order No. 00006**

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## Abbreviations and Acronyms

BNSF	Burlington Northern Santa Fe
C	Chrysotile
C	(suffix in Sample Identifier) coarse sample portion
CDM	CDM Federal Programs Corporation
cm <sup>2</sup>	square centimeter
COC	chain-of-custody
CSF	close support facility
DQO	data quality objective
EPA	U.S. Environmental Protection Agency
FG	fine ground sample portion
Grav	gravimetric
ID	identifier
ISO	International Organization for Standardization
KEH	Koch Environmental Health, Inc.
LA	Libby Amphibole asbestos
L	liters
MACTEC	MACTEC Federal Programs, Inc.
Millwork West	Millwork West Company
N/A	not applicable
ND	non-detect
NIOSH	National Institute for Occupational Safety and Health
OA	Other Amphibole
OU	operable unit
PLM	polarized light microscopy
PLM-9002	NIOSH 9002 polarized light microscopy method
QA/QC	quality assurance/quality control
QC	quality control
RI	remedial investigation
RI/FS	remedial investigation/feasibility study
S/cc	Structures per cubic centimeter
S/cm <sup>2</sup>	Structures per square centimeter
SAP	sampling and analysis plan
site	former export plant site
SQAPP	Phase 1 Sampling and Quality Assurance Project Plan
SRC	Syracuse Research Corporation
SOP	standard operating procedure
TR	trace
VE	visual area estimation
u	micron

## Abbreviations and Acronyms (continued)

UAO	Unilateral Administrative Order
VCS	vermiculite-containing soils
Volpe Center	John A. Volpe National Transportation Systems Center
W.R. Grace	W.R. Grace and Company
%	percent
<	less than
>	greater than
≥	greater than or equal to

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# Section 1 Introduction

## 1.1 Objective

This data summary report presents details of investigation and removal activities conducted by the U.S. Environmental Protection Agency (EPA) at the former export plant site (site), operable unit (OU) 1, in Libby, Montana. It also summarizes cleanup activities conducted by W.R. Grace and Company (W.R. Grace) at the site. The information contained in this report is intended to assist with remedial investigation decision-making in order to reach site close-out, specifically, the information presented in this summary will be compared to the conceptual site model and used to determine if additional sampling is required to fill any data gaps required to complete a risk assessment and/or remedial investigation specific to OU1.

## 1.2 Site Location and Background

The former export plant property encompasses an area of approximately 17 acres, and is situated on the south side of the Kootenai River, just north of the downtown area of the City of Libby, Montana (Figure 1-1). The property is bounded by the Kootenai River on the north, Montana Highway 37 (forthwith referred to as Highway 37) on the east, the Burlington Northern Santa Fe (BNSF) railroad thoroughfare on the south, and State of Montana property on the west.

The site was historically owned and used by W.R. Grace for stockpiling, staging, and distributing vermiculite and vermiculite concentrate to vermiculite processing areas and insulation distributors outside of Libby. Because vermiculite mined from Libby has been found to be contaminated with Libby amphibole asbestos (LA), a known human health risk, EPA initiated an emergency response action in November 1999 to address questions and concerns raised by citizens of Libby regarding possible ongoing exposures to asbestos fibers as a result of historical mining, processing, and exportation of asbestos-containing vermiculite. The Environmental Engineering Division (RTV-4E) of the John A. Volpe National Transportation Systems Center (Volpe Center) was tasked by EPA Region 8 to provide emergency response and remedial program support for the Libby Asbestos Project. This report summarizes each of the investigation events and subsequent cleanups that have occurred at OU1 between 1999 and 2006. Information regarding a quick response conducted by EPA in July 2007 is also provided.

Based on current land use, the site is divided into two distinct areas separated by City Service Road: the area of the former export plant facility to the south of City Service Road (approximately 12 acres) and a 4.7-acre recreational area known as Riverside Park to the north of City Service Road. For discussion purposes, these areas will be referred to throughout this report as Area 1 and Area 2, respectively. Figure 1-2 shows the delineation between the two areas. In addition, the shoulders of Highway 37 on the southwest side of the Highway 37 bridge are included in this report as an

area of concern because of their immediate proximity to the site and the known presence of vermiculite in this area.

### 1.3 Conceptual Site Model

The Libby Superfund Site has been subdivided into seven OUs to facilitate a phased approach to cleanup. The former export plant property is designated as OU1, as illustrated on Figure 1-3. Historically, the potential human receptors were workers involved with vermiculite processing at the site, both indoors in facility buildings and outdoors during transportation. The conceptual site model for OU1 is depicted in Figure 1-4. While all historic buildings have been removed, two buildings currently occupy the site (see Figure 1-2). These buildings and their uses are discussed in Section 1.4.2. Both surface and subsurface soils containing visible vermiculite and/or detectable levels of LA may remain a primary source of contamination, although confined to certain areas of the site. Areas of residual contamination from removal activities (i.e., visible vermiculite and/or detectable LA at depth), as well as contamination that has not yet been addressed, are shown on Figure 1-5 and discussed in Section 1.5.

Current potential human receptors are civil servants/commercial workers, tradespeople, and recreational visitors. The current civil servants are those persons who are part of the David Thompson Search and Rescue team. This team's support building is within the boundary of OU1 and is used to store equipment between responses. Recreational users include persons who use the boat ramp area to launch boats into the Kootenai River, persons who fish along the banks of the Kootenai River along the stretch of river that forms the northern boundary of the site, and persons who use Riverside Park.

Ecological receptors and environmental impacts will be characterized as part of OU4, which includes residential and commercial properties within the Libby Superfund Site. The potential exposure pathways related to tree bark and resulting ash will be evaluated as part of OU3.

Based on the conceptual site model, the potential contaminated media of concern for OU1 include: indoor air, air in vehicles, outdoor air near disturbed soil, general (ambient) outdoor air, and dust in air from disturbances of roofing or other outdoor surfaces.

## 1.4 Property Use

### 1.4.1 Historic Use

From the early 1960s to approximately 1992, the site was used by W.R. Grace for stockpiling and distributing vermiculite concentrate to W.R. Grace expansion plants and customers throughout the United States. Ownership of the site was transferred to the City of Libby in the mid-1990s.

Throughout its history, portions of the site have been leased to various parties for both commercial and non-commercial enterprises. From approximately 1977 to 1997,

organized youth baseball events (games and practices) were held at ball fields, which were centrally located in Area 1. Between approximately 1987 and 2000, the Millwork West Company (Millwork West), a retail lumberyard and building material supplier, leased the northwestern portion of Area 1. Buildings and equipment owned by Millwork West were involved in cleanup activities conducted by W.R. Grace in 2001 and 2002, as described in Section 2 of this report.

### **1.4.2 Current Use**

Area 1 is currently owned by the City of Libby and is undeveloped; however, a small section of the site is currently used by David Thompson Search and Rescue. In 2004, the search and rescue organization constructed a building (see Figure 1-2) containing a main office and a five-bay garage on the northwest portion of the site on the south side of City Service Road (also known as West Thomas Street). The organization performs various types of search and rescue activities involving but not limited to water- and mountain-related incidents. The garage is used for storing search and rescue equipment and vehicles. Several other agencies, including local and state law enforcement, also hold meetings in the main office. It has been reported that the city stockpiles street sweepings and snow at Area 1 as part of regular city maintenance activities. Access to Area 1 is unrestricted.

Area 2 is also currently owned by the city and serves a variety of recreational visitors. The main features of the park include two boat ramps, a pavilion, picnic tables, and a pumphouse. The newer of the two boat ramps is used by recreational boaters and commercial fishing outfitters; the older ramp is not commonly used due to swift current at its approach. The pumphouse (see Figure 1-2) houses a pump that draws non-potable water from the Kootenai River. The pump was installed jointly by the City of Libby and Lincoln County in 1999 to provide a backup water source to local fire departments. The pumphouse is accessed by city personnel in order to perform maintenance on the pump. The pump is connected to an external water spigot, which is used by the city to draw water for street sweeping and other maintenance operations, and other workers (such as employees of local fill pits and contractors working on EPA's removal program) to draw water primarily for use in dust suppression equipment.

### **1.4.3 Future Use**

Development of Area 1 into an industrial or recreational park is currently under consideration by the city's planning department; however, permanent future plans are unknown at this time. The city expects that David Thompson Search and Rescue will continue to utilize the northwest portion of the site. Area 2 will continue to serve recreational visitors; a change in land use is not currently anticipated.

## **1.5 Status of the Site**

As mentioned in Section 1.3, surface and subsurface soils containing visible vermiculite and/or detectable levels of LA remain at OU1 and may pose a risk to human health. In order to assist EPA in completing the remedial investigation/feasibility study (RI/FS) for OU1, a data gap analysis has been



prepared (CDM Federal Programs Corporation [CDM] 2007) that considers past site sampling events, as well as the conceptual site model for human inhalation exposures at OU1. The data gap analysis also makes recommendations for sampling scenarios to fill any data gaps identified at the site and to confirm site conditions as warranted.

In addition to showing the portions of Area 1 and Area 2 where contaminated soils have been removed, Figure 1-5 also shows areas of residual contamination in subsurface soils. It should be noted that analytical results of confirmation soil samples collected within the excavated areas indicate LA is present at depth at concentrations equal to or below EPA's action level for soil, as detailed in Section 2.

Vermiculite-containing soils (VCS) may also be present across the surface of the site for the following reasons:

- 1) Visible vermiculite in low levels was not a clean-up trigger at the time the removals were conducted
- 2) Work conducted by the city may have introduced vermiculite to the site over time (e.g., stockpiling of street sweepings)
- 3) Work conducted by the city (e.g., installation of a water pipeline), utility companies (e.g., phone cable installation), and their subcontractors, has caused VCS previously existing in the subsurface to have been brought to the surface during excavation activities

Vermiculite has been observed in surface soils near the Highway 37 right-of-way.

Subsurface VCS remains at varying levels as a result of previous mining-related processes conducted at the site. Figure 1-5 indicates locations where visible vermiculite has been observed and documented by field personnel; lack of such notation is not an indicator that vermiculite was not observed and/or is currently not present. Figure 1-5 also indicates the location of orange snow fencing used as a visual indication at maximum excavation depths where VCS was encountered during removal activities conducted by EPA.

## Section 2

### Site Activities

Multiple investigation, pre-removal, and removal events have occurred at the site to date. Each of the following events is summarized in this section:

Area	Date of Investigation/Action	Investigation/Action Activity
Area 1 – Former Export Plant	1999, December	Investigation soil sampling
	2000, March/April	Investigation soil and air sampling
	2000, October/November	Removal of vermiculite and contaminated dust, soil, and debris
	2001, March/April/August	Investigation soil, bulk materials, and dust sampling
	2001, September/October	Building demolition and removal of contaminated soil and debris
	2002, April/May	Investigation bulk materials and soil sampling
	2002, October – December	Building demolition and removal of contaminated soil
	2006, June	Investigation soil sampling
	2006, June – September	City of Libby water line installation
Area 2 – Riverside Park	2003, May/July	Investigation soil sampling
	2003, September /October	Verbal interview, property inspection, and pre-removal soil sampling
	2003, October/November	Removal of contaminated soil
	2007, July	Placement of rock cover

According to EPA's Residential/Commercial Cleanup Action Level and Clearance Criteria Technical Memorandum (EPA 2003a), no site-specific cleanup criterion currently exists for LA in air. Further, decisions regarding future remedial investigation or removal activities at the site are not dependent upon results of air samples collected in association with previous removal work. As such, personal and engineering control air monitoring data is not discussed in this report; however, available results are provided in Appendix A for informational purposes.

The field documentation used to compile this report can be found on CDM's e-room at [https://team.cdm.com/eRoom/R8-RAC/Libby/0\\_5209](https://team.cdm.com/eRoom/R8-RAC/Libby/0_5209). Information recorded on field sample data sheets is stored in the Libby2 project database and can be queried upon request.

## **2.1 Area 1 Investigation Sampling - December 1999**

In December 1999, a total of 80 soil samples (72 samples and 8 field duplicates) were collected from Area 1 of OU1. Sample locations were selected in consultation with an EPA or Volpe Center representative and generally followed a gridded approach, as depicted on Figure 2-1. All samples were collected as grab samples from the 0- to 2-inch or 2- to 12-inch depth interval as shown in Table 2-1. Samples were collected, handled, and analyzed in accordance with the Sampling and Quality Assurance Project Plan (SQAPP) for Environmental Monitoring for Asbestos (here forth referred to as the Phase 1 SQAPP) (EPA 1999). Results by the National Institute for Occupational Safety and Health (NIOSH) polarized light microscopy 9002 method (PLM-9002) (NIOSH 1994) varied between non-detect (ND) and 5 percent (%) LA. Sample locations and results are presented on Figure 2-1; results are shown in Table 2-1.

## **2.2 Area 1 Investigation Sampling - March/April 2000**

### **2.2.1 Soil Sampling**

In 2000, EPA requested additional soil samples be collected from Area 1 to supplement the December 1999 sampling and better characterize site soils. Between March 10 and 11, 2000, 16 grab soil samples and one duplicate were collected from the 0- to 2-inch depth interval, and 17 grab soil samples and five field duplicates from the 2- to 12-inch depth interval. One grab sample was also collected from bags of vermiculite stored outside the warehouse. All sample locations are shown on Figure 2-1. Samples were collected, handled, and analyzed in accordance with Revision 1 of the Phase 1 SQAPP (EPA 2000a). Results by PLM-9002 indicated levels of LA were present at concentrations ranging from ND to 10%. Results for the March 2000 event are shown on Figure 2-1 and summarized in Table 2-2. Locations of vermiculite observed during the March 2000 soil sampling event are shown on Figure 2-1.

### **2.2.2 Air Sampling**

In addition to soil sampling, EPA requested stationary outdoor air sampling be conducted in order to establish baseline concentrations of LA in ambient air at the former export plant. Accordingly, on separate days (April 4, 5, and 9, 2000), members of EPA's Response Engineering and Analytical Contract team collected stationary air samples (one field and one co-located sample each day) from various locations within the Area 1 boundary. Coordinate data are not available for these samples; therefore, sample locations are not presented graphically in this report. Samples were collected, handled, and analyzed in accordance with Revision 1 of the Phase 1 SQAPP (EPA 2000a); however, only the field samples were selected for analysis. The co-located samples remain in archive at a project-contracted laboratory. Results by the International Organization for Standardization (ISO) 10312 (ISO 1995) method indicated LA in ambient air at all three sample locations at concentrations ranging from 0.0001 to 0.0023 structures per cubic centimeter. Sample results are summarized in Table 2-3.

## 2.3 Area 1 Removal Event - July 2000 through January 2001

EPA issued a Unilateral Administrative Order (UAO) to W.R. Grace on May 23, 2000, based on the finding of LA at levels of concern in air and site soils in samples collected as part of sampling events described in Sections 2.1 and 2.2. The primary activities required by the UAO and outlined in the EPA-approved Export Plant Removal Action Work Plan (URS 2000) were to temporarily relocate the on-site business (Millwork West), clean five on-site historic buildings (Figure 2-2) and the building's contents, excavate and dispose of vermiculite and LA-contaminated soil and debris, and restore the property. Work by W.R. Grace's contractor, URS, and URS's contractors, ACandS and Koch Environmental Health, Inc. (KEH), was conducted between July 19, 2000 and January 5, 2001. During this period, the government provided oversight of activities to ensure compliance with the EPA-approved work plan, including health and safety protocols. Contaminated materials were disposed of at the former Libby vermiculite mine.

During soil excavation, confirmation soil sampling (i.e., samples collected from the floor of the excavation) was conducted by KEH. The 63 confirmation soil samples were analyzed by W.R. Grace's laboratory, R.J. Lee Group, using PLM with dispersion staining method EPA/600/R-93/16 (July 1993). At EPA's request, in order to expedite cleanup work and provide a quality control measure on samples analyzed by W.R. Grace, a portion of the confirmation soil samples were split (custody was transferred from KEH to CDM) and analyzed at EPA's onsite laboratory, EMSL Analytical by PLM-9002. A total of 18 split samples and one duplicate split sample were handled and analyzed in accordance with the Removal Action Sampling and Analysis Plan (SAP) for Confirmation Sampling of Soil and Perimeter and Personal Sampling of Air for Asbestos, Revision 1 (EPA 2000b). W.R. Grace confirmation soil sample results, as reported in the Final Report Removal Activities at the Export Plant, Libby, Montana (URS 2001), as well as results of the split soil samples are presented in Table 2-4. Results ranged from ND to 2% LA; however, W.R. Grace was directed to remove soil in additional 4-6 inch increments until EPA clearance criteria (<1% LA at depth) for confirmation soil sampling was met in each section of the excavation. Sample locations and results for all confirmation soil samples collected as part of this removal event are shown on Figure 2-3. Final confirmation soil sample results (i.e., results of the final sample collected in each grid or excavation area) are depicted on Figure 1-5.

Fill materials intended to be used for restoration at the Libby Superfund Site are first tested by EPA to ensure that they are suitable; that is, free from organic and inorganic contaminants (above background levels) and meet project-specific physical characteristics. Testing is conducted on a regular basis and includes: asbestos (every 3,000 cubic yards); volatile organic compounds, semi-volatile organic compounds, polychlorinated biphenyls, total petroleum hydrocarbons, herbicides, pesticides, and target analyte list metals (every 5,000 cubic yards); and geotechnical/agronomy parameters (every 5,000 cubic yards). Results of these tests are evaluated by qualified

project personnel; the material may then be used for restoration purposes once deemed suitable.

The backfill materials used at Area 1 during 2000 were obtained from the Plum Creek pit located in Libby, an EPA-approved source for fill materials. Asbestos analytical results for the Plum Creek pit are provided in Appendix B; results of the additional analyses are available upon request. Restoration at Area 1 consisted of backfilling the entire excavated area with a sufficient layer of common fill to bring the grade to within 6 inches of the original surveyed grade. The final 6-inch layer was filled with either gravel or topsoil, as appropriate, depending upon the original surface conditions.

## **2.4 Area 1 Investigation Sampling – March/April/ August 2001**

Following reports of observations of vermiculite and mining waste at the site following the UAO cleanup, EPA requested additional sampling to determine if residual levels of LA remained at the site. This section discusses investigation soil, bulk materials, and dust sampling activities that occurred in 2001. All samples presented in this section were collected, handled, and analyzed in accordance with Revision 1 of the Phase 1 SQAPP (EPA 2000a).

### **2.4.1 Soil Sampling**

A total of 15 soil samples were collected during 2001 at Area 1, as follows:

- Three grab samples were collected from the 0- to 1-inch depth interval at various locations near site buildings on March 2, 2001
- Five grab samples and one duplicate were collected from the 0- to 6-inch depth interval at various locations near site buildings on April 19, 2001
- One grab sample of in-place 1 1/2-inch minus grade fill material (from the Granite pit) from the 0- to 6-inch depth interval was collected on April 24, 2001. It is assumed that the sample was collected from fill material placed during the October/November 2000 removal event at Area 1.
- One 3-point composite sample was collected from the 0- to 4-inch depth interval at the site on/off ramp, and one 3-point composite sample (0- to 4-inch depth interval) near the BNSF railroad tracks on August 8, 2001
- Four grab samples were collected from the 0- to 4-inch depth interval on August 10, 2001

Locations and results for these soil samples are presented on Figure 2-1 (with the exception of the in-place fill material sample, for which no coordinate data is available) and results are summarized in Table 2-5. Results ranged from ND to 35% LA by PLM-9002; the in-place fill material sample was ND for LA. Locations of

vermiculite observed during the August 2001 soil sampling events are shown on Figure 2-1.

### 2.4.2 Bulk Materials Sampling

On April 19, 2001, 39 bulk material samples (e.g., wood shavings, insulation, debris, etc.) were collected from within the five buildings located at the site. Building locations are shown on Figure 2-2. Seven samples were collected within the pole barn; seven within the planar shop; six within the scale house/lumber storage building; 13 within the warehouse; and six within the shed. Results of the bulk material samples are presented in Table 2-6 and ranged from ND to 5% LA by PLM-9002.

### 2.4.3 Dust Sampling

Two single-point dust samples were collected on April 19, 2001: one from a horizontal surface inside the warehouse and the other from the exterior surface of the warehouse foundation. The location of the warehouse is shown on Figure 2-2. Results by ISO 10312 indicated loading of LA in dust on the building's foundation at 169,836 structures per square centimeter ( $S/cm^2$ ), while the indoor sample was ND for LA. These results are presented in Table 2-7.

On August 28, 2001, four separate 3-point composite dust samples were collected from horizontal surfaces inside the pole barn, the surface of equipment stored inside the shed, and from the surface of equipment and supplies stored inside each of two site storage containers (i.e., connex boxes) (Figure 2-2). Samples were analyzed by ISO 10312. Results for the four sampled areas indicated LA loading in dust at 129,127  $S/cm^2$ ; 97,455  $S/cm^2$ ; 19,491  $S/cm^2$ ; and 40,200  $S/cm^2$ , respectively, as shown in Table 2-7.

## 2.5 Area 1 Removal Event – September/October 2001

As a result of soil, bulk materials, and dust investigation sampling conducted by EPA in spring and summer 2001 (Section 2.4), EPA required W.R. Grace to conduct a cleanup action to address residual LA contamination in site buildings and soils. The work was conducted between September 5 and October 17, 2001 in accordance with addenda to the Export Plant Removal Action Work Plan (URS 2000). Ultimately, four of the five buildings (all but the planar shop – see Figure 2-2) were demolished and additional soil was excavated from the site. The contaminated soil and debris was disposed of at the former Libby vermiculite mine. EPA contractors provided general oversight, health and safety monitoring, and confirmation dust and soil sampling during the removal. All samples were collected, handled, and analyzed in accordance with the Removal Action SAP (EPA 2000b). The following sections describe sample collection associated with the September/October 2001 W.R. Grace removal activities.

### 2.5.1 Dust Sampling

One 3-point composite dust sample was collected on September 6, 2001 from the surface of lumber that had been decontaminated and moved outside of the exclusion zone. This sample was analyzed by ISO 10312 and found to be ND for LA (Table 2-8).

On September 15, 2001, for informational purposes, one 3-point composite dust sample was collected from the surface of a lumber pile located inside the exclusion zone. Sample results by ISO 10312 indicated LA loading at 365 S/cm<sup>2</sup> (Table 2-8).

On October 12, 2001, six 3-point composite dust samples were collected in and around the planar shop. The location of this building is shown on Figure 2-2. Samples were collected at the following locations:

- Surfaces immediately outside the entrance to the building
- Surfaces of the sawdust exhaust chute outside the building
- Surface of the covered concrete pad outside the building
- Various horizontal surfaces inside the building
- Horizontal surfaces inside the building's lunch room
- Surfaces immediately inside the entrance to the building

All six samples were sent for analysis by ISO 10312; results indicated LA loading in dust in and around the planar shop at levels between 609 S/cm<sup>2</sup> and 444,636 S/cm<sup>2</sup>. Table 2-8 presents these results.

### 2.5.2 Soil Sampling

On October 4 and 5, 2001, 23 subsurface confirmation soil samples were collected by EPA in association with oversight of the W.R. Grace removal activities. Subsurface samples were collected following a gridded approach from depths varying between 16 and 50 inches below ground surface in the following areas: the former pole barn, former warehouse, former scale house/lumber storage building, former shed, east ball field (easternmost field of two ball fields that used to be centrally-located in Area 1), and BNSF spur extending just south of the planar shop. Refer to Figure 2-2 for these locations. Samples were composite samples with varying numbers of subsamples (between two and five); results were all <1% LA by PLM-9002 and are presented in Table 2-9.

In addition to subsurface confirmation soil sampling, 39 surface soil samples were collected on October 9 and 10, 2001 from areas that were previously remediated but suspected to have been impacted (i.e., cross contaminated) by current-year removal activities. These surface samples were 5-point composites from the 0- to 2-inch depth interval from the grid locations identified in Table 2-9. Results were either ND or <1% LA by PLM-9002 (Table 2-9). Eight additional soil samples were collected on

October 16, 2001 from areas that were not anticipated to have been impacted by removal activities, in order to determine cleanup needs. Of the eight soil samples, six were surface samples from 0 to 2 inches below ground surface and two were subsurface samples from 8 to 10 inches below ground surface. Results of the surface samples were all ND for LA, while the subsurface samples were <1% LA (Table 2-9). As a result of these findings, EPA required W.R. Grace to cover all impacted areas with a 4-inch layer of crushed gravel. Locations and results for samples collected during October 2001 are shown on Figure 2-3. Final confirmation soil sample results (i.e., results of the final sample collected in each grid or excavation area) are shown on Figure 1-5.

Similar to the 2000 removal work, restoration was conducted in accordance with the site work plan (URS 2000) and applicable addenda. Backfill materials were obtained from the Plum Creek gravel pit located in Libby, an EPA-approved source for fill materials. Analytical results of asbestos testing for the Plum Creek pit are provided in Appendix B.

## **2.6 Area 1 Investigation Sampling - April/May 2002**

In response to concerns of site tenants regarding potential residual contamination, EPA conducted additional investigation sampling at the site during the spring of 2002. This section describes these bulk materials and soil sampling activities.

### **2.6.1 Bulk Materials Sampling**

On April 9, 2002, two bulk materials samples were collected from the interior of equipment owned and operated by Millwork West. The samples were collected, handled, and analyzed in accordance with the Phase 1 SQAPP (EPA 2000a). Both samples were ND for LA by PLM-9002. Results are summarized in Table 2-10.

### **2.6.2 Soil Sampling**

On May 8, 2002, two 3-point composite soil samples were collected from areas at the former export plant where suspect mine-related material had been identified. At the time of sampling, visible vermiculite was noted near two metal connex boxes located on site. The visible vermiculite was believed to be the result of a test pit-like excavation adjacent to the BNSF railroad, which may have been tracked onto the clean fill placed by W.R. Grace during previous years' removal work. Samples were collected, handled, and analyzed in accordance with the Phase 1 SQAPP (EPA 2000a). Both samples contained <1% LA by PLM-9002, as shown on Figure 2-1 and summarized in Table 2-11. Locations of vermiculite observed during this soil sampling event are shown on Figure 2-1.

## **2.7 Area 1 Removal Event - October through December 2002**

As a result of investigation sampling conducted in earlier in 2002, starting October 14, 2002, W.R. Grace began removing all remaining building material and debris from Area 1 at the direction of EPA. The work was conducted in accordance with addenda



to the Export Plant Removal Action Work Plan (URS 2000). Addenda are available from the EPA Administrative Record. Contaminated soil from the footprint of the demolished planar shop and from an area near the BNSF railroad tracks was also removed. All contaminated soil and building material was disposed of at the former Libby vermiculite mine. During this work, EPA provided oversight and confirmation soil sampling support, as well as personal and perimeter health and safety air monitoring. Removal activities concluded on December 11, 2002.

As part of this removal event, removal oversight personnel collected a total of 44, 5-point composite subsurface confirmation soil samples on December 3, 2002 (Figure 2-3). A total of 36 soil samples were analyzed, while 8 samples were archived at a project-contracted laboratory. The subsurface samples were collected from the excavation floor, and followed a gridded approach in the main excavation zone. Sample depths averaged 18 inches below ground surface; however, three areas required excavation to depths of 38, 74, and 122 inches below ground surface due to encountering visible vermiculite and/or building foundations (Figure 1-5).

Confirmation soil samples were collected, handled, and analyzed in accordance with the Removal Action SAP (EPA 2000b). As shown in Table 2-12, results were either ND or <1% LA by PLM-9002. Final confirmation soil sample results (i.e., results of the final sample collected in each grid or excavation area) are depicted on Figure 1-5. Restoration was conducted in accordance with the site work plan (URS 2000) and applicable addenda using locally available EPA-approved backfill materials from the Plum Creek pit. Analytical results of asbestos testing for the Plum Creek pit for 2002 are provided in Appendix B. Excavation limits resulting from removal work conducted by W.R. Grace between 2000 and 2002 are depicted on Figure 1-5.

## **2.8 Area 1 City Water Line Installation – June through September 2006**

In the summer of 2006, the City of Libby began excavating a trench through the field portion of Area 1 parallel to City Service Road in preparation for installing a new drinking water supply pipeline, (Figure 2-4). Gross quantities of vermiculite were encountered in localized areas near the existing hydrant at depths between 10 and 36 inches below ground surface. Following the discovery of vermiculite, the city halted work until the appropriate protective measures could be put in place.

In June 2006, EPA requested samples be collected from the soil stockpiled during the initial pipeline excavation. A total of eight, 5-point composite soil samples were collected: four from the surface 2 inches of the stockpiled material and four from the 0- to 2-inch depth interval in the area immediately surrounding the stockpile. Samples were collected, handled, and analyzed in accordance with the Draft Final Response Action Work Plan (EPA 2003b). Sample locations and results (by PLM-9002) are shown on Figure 2-1. Results ranged from ND to 3% LA, and are presented in Table 2-13.

As a result of discussions between the city, EPA, and the Volpe Center, an addendum (CDM 2006) to the Draft Final Response Action Work Plan (EPA 2003b) was prepared in order to safely complete the water line installation. An electronic version of the addendum is provided in Appendix F. This work was carried out between August 24 and September 21, 2006, during which EPA provided oversight and air monitoring in accordance with the response action work plan. The location of the newly-installed city water pipeline is shown on Figure 2-4.

## 2.9 Other Area 1 Activity

During an August 22, 2007 site visit, approximately 50 cubic yards of angular rock (riprap) was observed in several piles along the south side of City Service Road, approximately half way between the City Service Road/MT Highway 37 intersection and the David Thomson Search and Rescue building. According to the city, the riprap was obtained from the U.S. Army Corps of Engineers' pit (located on Fisher River Road approximately 17 miles east of Libby) for the purpose covering two areas of exposed orange fencing: one along the Kootenai River bank in between the new and old boat ramps and the other on the surface of the old boat ramp.

## 2.10 Area 2 Investigation Sampling - May/July 2003

The City of Libby initiated renovations at Riverside Park in May 2003. A 2-inch thick layer of vermiculite along the west side of the ramp was discovered during construction of a new boat ramp. The layer was approximately 8 to 10 inches below the ground surface and was exposed along the ramp. Additional vermiculite-containing soil was exposed during renovation of the picnic area when overburden material was scraped off the top of the bank west of the new boat ramp. Subsequent personal communications with former city worker's indicated that the vermiculite found in this area was scraped from Area 2 and used to fill in low spots in Area 1.

In response to the discovery of contaminated material at the site, a visual inspection and soil sampling was conducted on May 22, 2003. Visible vermiculite was observed in the park and along the banks of the Kootenai River. In conjunction with the inspection, three soil samples were collected from the Riverside Park boat ramp. The samples were 5-point composites from the 0- to 1-inch depth interval and were collected, handled, and analyzed in accordance with the Phase 1 SQAPP (EPA 2000a). Results for the samples were ND by PLM-9002 (Figure 2-1 and Table 2-14). Following the inspection and receipt of sample results, EPA covered and fenced-off those areas with the greatest amounts of visible contamination in order to mitigate any short-term exposure risk. Erosion control fabric and silt fences were installed along the riverbank as interim protective measures until the site was remediated in the fall of 2003.

On July 19, 2003, two soil samples were subsequently collected at the boat ramp - one from the north and south edges of the concrete pad and the other from the area east of the pad. Both samples were 5-point composites from the 0- to 6-inch depth interval. These samples were collected, handled, and analyzed in accordance with the Phase 1 SQAPP (EPA 2000a). Sample locations and results for the May and July

2003 soil sampling events are shown on Figure 2-1 and results are summarized in Table 2-14. It should be noted that the July 2003 soil samples were subsequently processed at CDM's close support facility (CSF) in accordance with the Close Support Facility Soil Preparation Plan, Revision 1 (CDM 2004) and sent for analysis by two additional PLM analytical methods - visual area estimation (PLM-VE) and gravimetric (PLM-Grav) (Syracuse Research Corporation [SRC] 2003).

EPA is in the process of evaluating the accuracy and replicability of each of these methods. However, based on EPA's performance evaluation study to date, PLM-VE results are currently being used to make project removal decisions. Therefore, for the purposes of this report, only PLM-VE results are presented in Table 2-14.

## **2.11 Area 2 Pre-removal Event - September/October 2003**

Pre-removal characterization was conducted in accordance with the Final Remedial Investigation and Removal Action Work Plan for Riverside Park (CDM 2003a). An electronic version of the work plan is provided in Appendix F. These activities included a verbal interview with city park personnel, visual inspection of the site, and collection of both surface and subsurface soil samples. These activities were completed between September 9 and 15, 2003.

### **2.11.1 Verbal Interview**

Dan Thede, Libby's Supervisor of City Services, was interviewed on September 15, 2003 to discuss historical use of Riverside Park. In summary, Mr. Thede confirmed use of the area for storing vermiculite during the period of operations at the former export plant.

### **2.11.2 Property Inspection**

During the September 2003 visual inspection, vermiculite was observed at several locations within the park but was generally concentrated in areas on the river side of the former access road that ran through the property, including the entire length of the riverbank. Notable amounts of vermiculite were also observed on the southwest side of the embankment (Area 1 side) of City Service Road. Lastly, an isolated area of vermiculite was located at the bottom of the embankment of West Thomas Street of the east side of Highway 37. The general location of vermiculite found during this site inspection is shown on Figure 2-1; however, the extent of the vermiculite has not been recorded to date.

### **2.11.3 Soil Sampling**

Soil sampling activities occurred between September 9 and 13, 2003 and included both surface and subsurface test pit samples. All samples were collected, handled, and analyzed in accordance with the work plan for the event (CDM 2003a). In summary, seven surface soil samples were collected within the park; three surface soil samples were collected along the riverbank on the north side of the park; nine surface soil samples were collected on the north and five surface samples collected on the south side of the embankment of City Service Road between Highway 37 and the

entrance to the park (Figure 2-1). Embankment samples were collected at 50-foot intervals as described in the work plan. It should be noted that although the embankment samples were collected as part of the Riverside Park (Area 2) work plan, the embankment is included as part of Area 1 for the purpose of potential future investigation and cleanup efforts. All surface samples were either 4- or 5-point composites from the 0- to 6-inch depth interval.

For subsurface sampling, 12 test pits were excavated and sampled, including one test pit that was dug at a later date (October 23, 2003) during subsequent removal work. Grab samples were collected at depths ranging from 12 to 39 inches below ground surface. The work plan stipulated that six of the test pits would have a second test pit excavated offset either 50 feet toward the former export plant or 30 feet toward the river, depending on whether or not visible vermiculite was encountered in the six test pits. Four of these secondary offset test pits were excavated. Detailed test pit observations can be found in the Remedial Investigation and Removal Action Work Plan for Riverside Park Final RI Results Addendum (CDM 2003b). An electronic version of the addendum is provided in Appendix F.

All soil samples collected during this event were processed at CDM's CSF in Denver in accordance with the soil preparation plan (CDM 2004) and analyzed for LA using two techniques: PLM-VE and PLM-Grav (SRC 2003). Again, for the purposes of this report, only PLM-VE results are presented. Locations and results for all Riverside Park pre-removal soil samples are presented on Figure 2-1, and results are summarized in Table 2-15.

## **2.12 Area 2 Removal Event – October/November 2003**

Based on visual inspections and the results of pre-removal surface and subsurface soil sampling at Area 2, EPA determined that site soils required removal. In general, the Riverside Park removal work plan (CDM 2003a) called for soils to be excavated to a depth of 12 inches throughout the entire park area, with the exception of the Kootenai riverbank and the embankment on the northeast side (the river side) of City Service Road. Soil in these two locations was excavated to a depth of 6 inches. Excavation of the embankment on the southeast side of City Service Road has not yet been conducted but may be coordinated with other cleanup at OU1. In accordance with the Riverside Park work plan (CDM 2003a), which took into account visible vermiculite in addition to LA analytical results, additional 6-inch lifts were removed if vermiculite was visible at the floor of the excavation. This iterative process was carried throughout the site, with a maximum excavation depth of 3 feet below original ground surface elevation, except for the riverbank and City Service Road embankment, where maximum excavation depths were 12 inches below ground surface (Figure 1-5).

A total of 59 confirmation soil samples were collected between October 2 and November 13, 2003. Samples were 5-point composites and were collected from the floor of the excavation at depths of 6 inches up to 36 inches below ground surface. Results by PLM-9002 for all samples were either ND or <1% LA, with the exception of

one sample (1R-24096) in the southwest portion of Area 2 (refer to Figure 2-3). The result for sample 1R-24096 was 2% LA, prompting the removal of an additional 6-inch layer of material from this area in accordance with the removal work plan. Sample results following the additional excavation were <1% LA by PLM-9002 (sample 1R-24100). Log notes indicate that two other areas were re-sampled at the discretion of on-site removal oversight personnel although the preliminary confirmation soil sample results met the soil clearance criterion of <1% LA. Details of these samples (1R-21996 and 1R-24099) are noted in the Location Description column of Table 2-16. All sample locations and results for the Riverside Park cleanup are shown on Figure 2-3 and summarized in Table 2-16. Following excavation and confirmation soil sampling, the area was restored in accordance with the work plan (CDM 2003a). Restoration consisted of backfilling the site to grade using materials from the Boothman Pit, a local EPA-approved fill source, and hydroseeding as required. Analytical results of asbestos testing for the Boothman pit for 2003 are provided in Appendix B; results of the additional fill tests are available upon request. It should be noted that orange snow fencing was placed at depth (i.e., on the excavation floor) to indicate the presence of vermiculite in the event that soils in these areas are disturbed in the future. Fencing placement is shown on Figure 1-5.

As part of planned improvements by the city and in conjunction with the 2003 Area 2 removal work, a new boat ramp was installed downstream of the existing boat ramp. Prior to removal work, the city obtained riprap from the U.S. Army Corps of Engineers' pit located on Fisher River Road. The riprap was placed along the toe of the bank in the area just downstream of the new boat ramp. This riprap was removed, washed, and replaced during excavation activities. During restoration, topsoil was placed within the interstitial spaces of the riprap. Also prior to removal work, the city obtained riprap to be installed into the river about three-quarters of the way from the new boat ramp to the existing boat ramp in order to slow the velocity of the water in the area of the new boat ramp. The removal contractor (Environmental Restoration) placed this riprap in consultation with the city during restoration activities.

The extent of excavation resulting from removal work conducted by EPA at Area 2 in 2003 is depicted on Figure 1-5. Final confirmation soil sampling results (i.e., the final sample collected in each grid or excavation area) are also depicted on Figure 1-5.

## 2.13 Other Area 2 Activity

In July 2007, EPA was asked to address subsurface vermiculite that was brought to the surface during the installation of cable by a phone company. The company was installing a cable throughout the extent of Area 2, in a generally east to west line, at a depth of approximately 2 feet below ground surface (Figure 1-5). Vermiculite was exposed at the easternmost toe of the area previously excavated during the 2003 Riverside Park cleanup; however, excavation was halted once the orange snow fencing, which was placed over areas of VCS in 2003, was encountered. EPA responded by covering the area with 4- to 6-inches of rock (Figure 1-5).

## Section 3

# Quality Assurance/Quality Control

CDM has established a formal quality assurance (QA) program to ensure consistently high quality project deliverables. The field quality assurance program was designed in accordance with CDM's Quality Management Plan for the EPA Region 8 Response Action Contract, Revision 1 (CDM 2002). For work conducted by CDM in Libby, quality assurance/quality control (QA/QC) measures include, but are not limited to, the collection of QC samples (such as duplicate samples and field blanks), implementation of a laboratory QA program, review of project reports by a CDM-approved QA staff member, and an auditing component to assess the effectiveness of the QA program.

The following sections describe the following QA/QC components implemented for work conducted by EPA and its contractors at OU1: collection of field quality control (QC) samples; changes to procedures in guidance documents; data usability; and achievement of data quality objectives (DQOs).

### 3.1 Field Quality Control Sample Collection

#### 3.1.1 Air and Dust

Two types of air and dust QC samples were collected by sampling personnel: lot blanks and field blanks. Lot blanks are collected to ensure cassettes used for sample collection are acceptable. As such, results for the lot blanks must be below the detection limit for the analytical method in order for cassettes to be put into use. Lot blanks for the Libby site were required to be collected and analyzed at a rate of one lot blank per 50 cassettes; however, this goal rate was established for the Libby site as a whole and therefore lot blank collection rates from OU1 may not be representative of project collection rates. Lot blank data collected in Libby indicate asbestos fiber counts below the detection limit of the analytical method; therefore, air and dust cassettes were deemed usable for sampling at OU1. Libby lot blank data is provided in Appendix B.

Field blanks are indicators of potential sample collection issues or background levels of asbestos at a site. Field blanks for air and dust sampling summarized in this report were required to be collected at a frequency of two field blanks per media per work site per day. Field blank data for OU1 indicate asbestos fiber counts below the detection limit of the analytical method. Operable Unit 1 field blank data is provided in Appendix C.

Overall field QC sample collection frequency and data evaluation for the Libby Superfund Site is presented in the Draft Quality Assurance and Quality Control Summary Report for the Libby Asbestos Superfund Site (SRC 2007).

### 3.1.2 Soil

Equipment blanks and field duplicate samples comprise the two types of QC samples collected at OU1. Equipment blanks were only required as part of the pre-removal sampling at Riverside Park and were collected at the required frequency of one per day. Analytical results for these field QC samples were all ND for LA (Appendix D). For OU1 investigation and pre-removal soil sampling, one field duplicate per 20 field samples was required to be collected; however, this goal rate was established for the Libby site as a whole and therefore duplicate soil sample rates from OU1 may not be representative of project collection rates. Soil duplicate sample collection frequency and data evaluation for the Libby Superfund Site is presented in the Draft Quality Assurance and Quality Control Summary Report for the Libby Asbestos Superfund Site (SRC 2007). To date, field QC samples for confirmation soil sampling is not required at the Libby Superfund Site.

## 3.2 Modifications to Governing Documents

Modifications to the governing documents listed below were approved by EPA and Volpe Center technical representatives and implemented by field staff during activities at OU1. Signed modification forms and supporting documentation for the Phase 1 SQAPP and Removal Action SAP is located on CDM's e-room at [https://team.cdm.com/eRoom/R8-RAC/Libby/0\\_4c29](https://team.cdm.com/eRoom/R8-RAC/Libby/0_4c29). Modifications to the RI and Removal Action Work Plan for Riverside Park were approved by EPA in the September 26, 2003 Draft RI Results Addendum (CDM 2003b). No negative implications or biases to data have been noted as a result of these modifications.

#### *Phase 1 SQAPP, Revision 0 (EPA 1999)*

No deviations to procedures outlined in this document were noted.

#### *Phase 1 SQAPP, Revision 1 (EPA 2000a)*

- Effective August 29, 2001: To decontaminate air and dust sampling equipment, locally available filtered water will be used rather than deionized water.
- Effective August 30, 2001: On field sample data sheets, separate 10-digit and 6-digit sample identifiers (IDs) will not be used to label samples; rather, only the 6-digit (e.g., 1-XXXXX) ID will be used.
- Effective December 4, 2001: Rotometer calibration will be conducted once per month rather than once per week as stated in standard operating procedure (SOP) EPA-Libby-01, Revision 1.
- Effective December 4, 2001: Since the procedure for completing field sample data sheets (SOP ISSI-Libby-04) was omitted from the guidance document, field sample data sheets will be completed using examples prepared and maintained on-site by the field manager.

- Effective December 10, 2001: EPA-approved chain-of-custody (COC) forms specific to asbestos sampling will be used rather than the standard COC form provided in the SOP for sample custody and handling (CDM SOP 1-2).
- Effective December 10, 2001: Sample labels will only contain the sample ID number rather than detailed information (e.g., sample date, sample time, etc.).
- Effective December 10, 2001: Soil samples will not be collected in pans, trays, or bowls as required by CDM SOP 1-3 (Surface Soil Sampling); rather, material will be placed directly into plastic zip-top bags and homogenized. Core samplers or bulb planters will be used when necessary to collect subsamples of approximately equal volume. In addition, ice will not be used for packaging.
- Effective December 10, 2001: As stated in CDM SOP 2-1 (Packaging and Shipping of Environmental Samples), asbestos samples (all media) will not be packaged for handling or shipment using vermiculite or ice.
- Effective December 10, 2001: Locally available deionized water will be used to decontaminate sampling implements and equipment (e.g., air sampling pumps, trowels, bulb planters, etc.) rather than deionized water, as stated in CDM's SOP for Field Equipment Decontamination at Nonradioactive Sites (CDM SOP 4-5). In addition, waste water will be disposed of onsite and not captured.
- Effective December 10, 2001: Dust samples will be collected over three 100-square centimeter (cm<sup>2</sup>) areas rather than a single 100-cm<sup>2</sup> area as called for by the American Society for Testing and Materials method D5755-95.

***Removal Action SAP, Revision 1 (EPA 2000b)***

- Effective December 4, 2001: Rotometer calibration will be conducted once per month rather than once per week as stated in standard operating procedure (SOP) EPA-Libby-01, Revision 1.
- Effective December 10, 2001: Meteorological station data will only be collected at critical removal actions, as deemed by the government.

***Final Remedial Investigation and Removal Action Work Plan for Riverside Park (CDM 2003a)***

- Vermiculite was observed in one soil subsample location; therefore, only four subsamples were collected rather than five.
- Four proposed riverbank sample locations were not sampled due to visible vermiculite.
- One offset test pit was not excavated due to its proximity to another test pit.
- One offset test pit was excavated at a 30-foot interval versus the required 50-foot interval due to interference by fiber optic cable marking.



- One offset test pit was not excavated because the offset location was in the Kootenai River.

### 3.3 Data Usability

Data collected at OU1 were evaluated by the EPA On-Scene Coordinator (for emergency response data) or government-contracted staff in consultation with EPA or Volpe Center representatives. Data was not validated past that which is required by the analytical laboratories' QA/QC program. It is assumed that the raw data were useable for their intended purposes.

### 3.4 Achievement of Data Quality Objectives

Each guidance document referenced in this report describes the DQOs identified for each data collection event conducted at OU1 or the Libby Superfund Site as a whole. Data collected under the 1999 or 2000 Phase 1 SQAPPs are under review by the EPA project team as part of the human health risk assessment; however, the general Phase 1 objectives were met. All other work plan-specific DQOs were met. It should be noted that significant changes in soil and dust sampling approach and inspection protocols for visible vermiculite have recently been implemented at the Libby Superfund Site. Therefore, data previously collected at OU1 may not be sufficient for determining data gaps or cleanup decisions. A comprehensive site inspection, as well as soil and dust sampling using the new site protocols, may be necessary.

## Section 4

### References

CDM. 2002. EPA Region VIII Response Action Contract Quality Management Plan, Revision 1. Prepared for EPA by CDM.

\_\_\_\_\_. 2003a. Final Remedial Investigation and Removal Action Work Plan for Riverside Park. September 12. Prepared for EPA by CDM.

\_\_\_\_\_. 2003b. Remedial Investigation and Removal Action Work Plan for Riverside Park - Final RI Results Addendum, Libby Asbestos Site, Operable Unit 4. September 26. Prepared for EPA by CDM.

\_\_\_\_\_. 2004. Close Support Facility Soil Preparation Plan, Revision No. 1, Libby, Montana Asbestos Project, Sample Processing. March. Prepared for EPA by CDM.

\_\_\_\_\_. 2006. Addendum (with Amendment) to the Response Action Work Plan, Trench Excavation at Former Export Plant, 303 West Thomas Street. July 24. Prepared for EPA by the Volpe Center and CDM.

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EPA. 1999. Sampling and Quality Assurance Project Plan for Libby, Montana Environmental Monitoring for Asbestos (Phase 1 SQAPP). December 6.

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\_\_\_\_\_. 2000b. Removal Action Sampling and Analysis Plan for Confirmation Sampling of Soil and Perimeter and Personal Sampling of Air for Asbestos, Operable Unit 02, Former Screening Plant Area Near Libby, Montana, Revision 1. September.

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ISO. 1995. Ambient Air - Determination of Asbestos Fibers: Direct-Transfer Transmission Electron Microscopy Method.

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SRC. 2003. Analysis of Asbestos Fibers in Soil by PLM. SRC-LIBBY-03, Revision 0. March 3, 2003. Prepared for EPA by SRC.

\_\_\_\_\_. 2007. Draft Quality Assurance and Quality Control Summary Report for the Libby Asbestos Superfund Site, Libby, Montana. Prepared for EPA by SRC. In preparation.

URS. 2000. Approved Work Plan, Export Plant Removal Action, Libby, Montana. Prepared for W.R. Grace by URS. July 28.



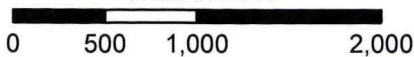


Z:\GIS\Public\Libby\OU1 SiteOverview.mxd

The OU boundaries depicted are based on the definitions found in the Libby Asbestos Conceptual Site Model. Because investigation of the nature and extent of contamination continues, the OU boundaries are subject to change. These OU boundaries are current as of June 2007.



Scale of Feet

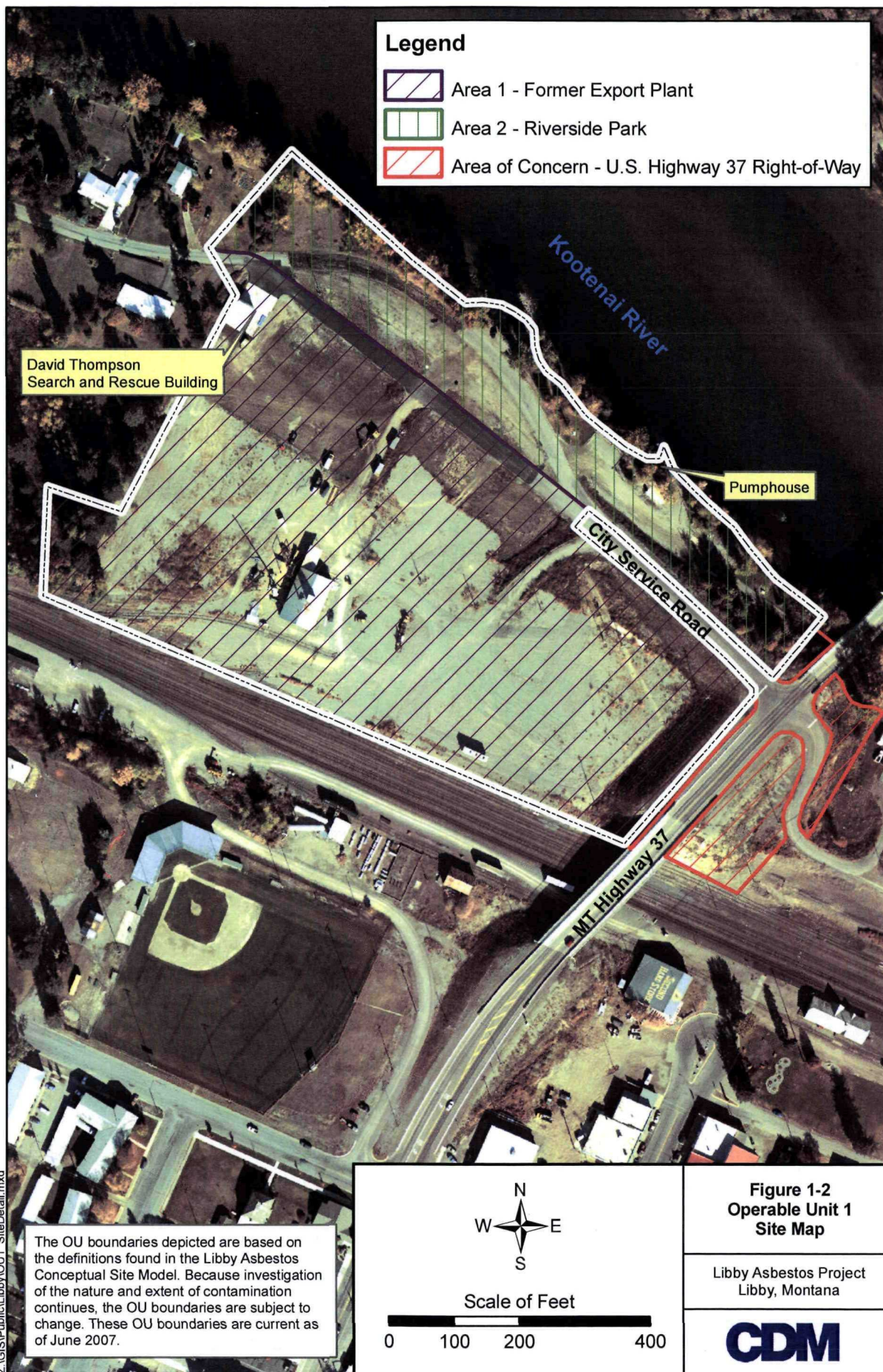


**Figure 1-1  
Operable Unit 1  
Site Location Map**

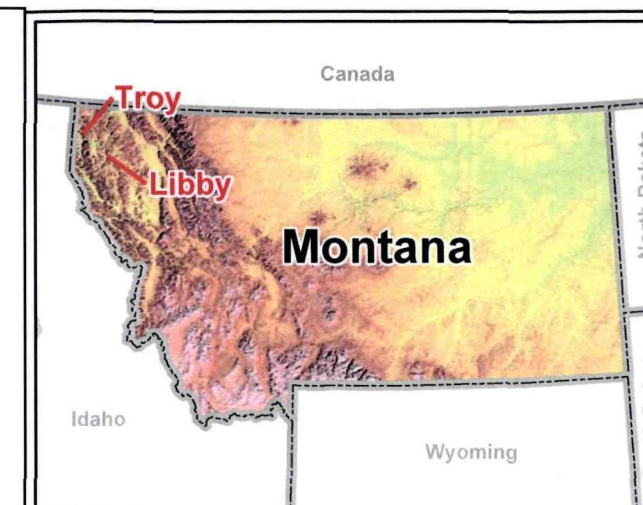
Libby Asbestos Project  
Libby, Montana

**CDM**



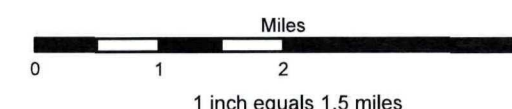






# Legend

- OU1 - Former Export Plant
- OU2 - Former Screening Plant, Flyway Property, Highway 37 right-of-way adjacent to the Screening Plant, and the KDC Bluffs
- OU3 - Mine site area, Kootenai River, Rainy Creek and Rainy Creek Road
- OU4 - Residential, Commercial, Industrial Properties including Schools and Parks
- OU5 - Former Stimson Lumber Mill
- OU6 - BNSF Railyard, Tracks, and Right -of-way
- OU7 - Troy



DRAFT - For Official Use Only

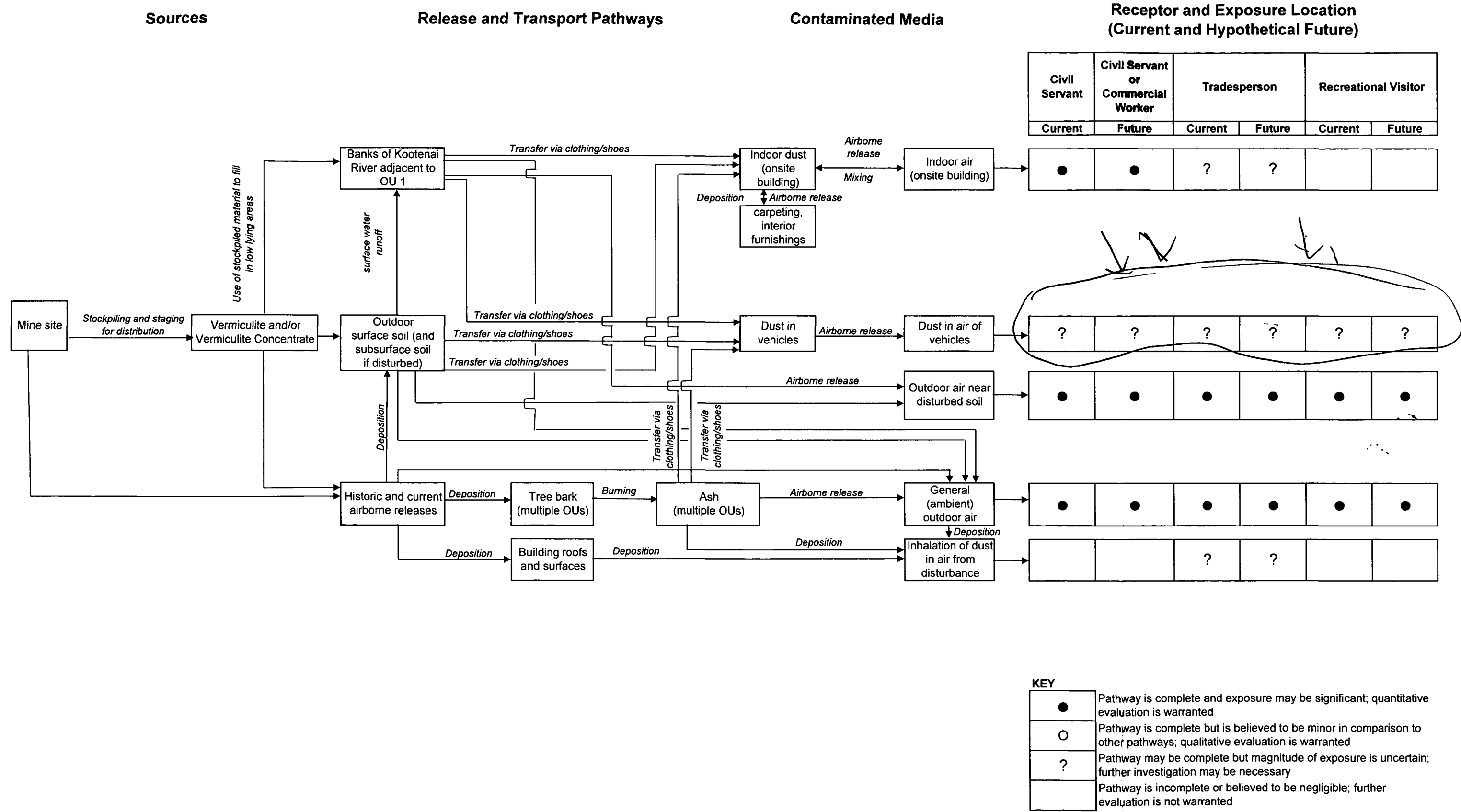
Figure 1-3

Operable Unit (OU) Boundaries  
 Libby Asbestos Site  
 Libby, Montana

**CDM**



FIGURE 1-4. CONCEPTUAL SITE MODEL FOR INHALATION EXPOSURES TO ASBESTOS  
Libby Superfund Site -- Operable Unit 1 (Former Export Plant)



**TARGET SHEET**  
EPA REGION VIII  
**SUPERFUND DOCUMENT MANAGEMENT SYSTEM**

DOCUMENT NUMBER: 1073557

SITE NAME: LIBBY ASBESTOS

DOCUMENT DATE: 08/27/2007

**DOCUMENT NOT SCANNED**

Due to one of the following reasons:

- ☐ PHOTOGRAPHS
- ☐ 3-DIMENSIONAL
- ☒ OVERSIZED
- ☐ AUDIO/VISUAL
- ☐ PERMANENTLY BOUND DOCUMENTS
- ☐ POOR LEGIBILITY
- ☐ OTHER
- ☐ NOT AVAILABLE
- ☐ TYPES OF DOCUMENTS NOT TO BE SCANNED  
(Data Packages, Data Validation, Sampling Data, CBI, Chain of Custody)

DOCUMENT DESCRIPTION:

FIGURE 1-5 LOCATION AND DEPTH OF RESIDUAL CONTAMINATION  
AT OU 1 BASED ON INVESTIGATION ACTIVITIES AND REMOVAL-  
RELATED CONFIRMATION SOIL SAMPLING



**TARGET SHEET**  
EPA REGION VIII  
**SUPERFUND DOCUMENT MANAGEMENT SYSTEM**

DOCUMENT NUMBER: 1073557

SITE NAME: LIBBY ASBESTOS

DOCUMENT DATE: 08/27/2007

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Due to one of the following reasons:

- ☐ PHOTOGRAPHS
- ☐ 3-DIMENSIONAL
- ☒ OVERSIZED
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- ☐ PERMANENTLY BOUND DOCUMENTS
- ☐ POOR LEGIBILITY
- ☐ OTHER
- ☐ NOT AVAILABLE
- ☐ TYPES OF DOCUMENTS NOT TO BE SCANNED  
(Data Packages, Data Validation, Sampling Data, CBI, Chain of Custody)

DOCUMENT DESCRIPTION:

FIGURE 2-1 RESULTS OF SOIL SAMPLING AND LOCATION OF  
VERMICULITE NOTED DURING INVESTIGATION AND PRE-REMOVAL  
ACTIVITIES AT OU 1

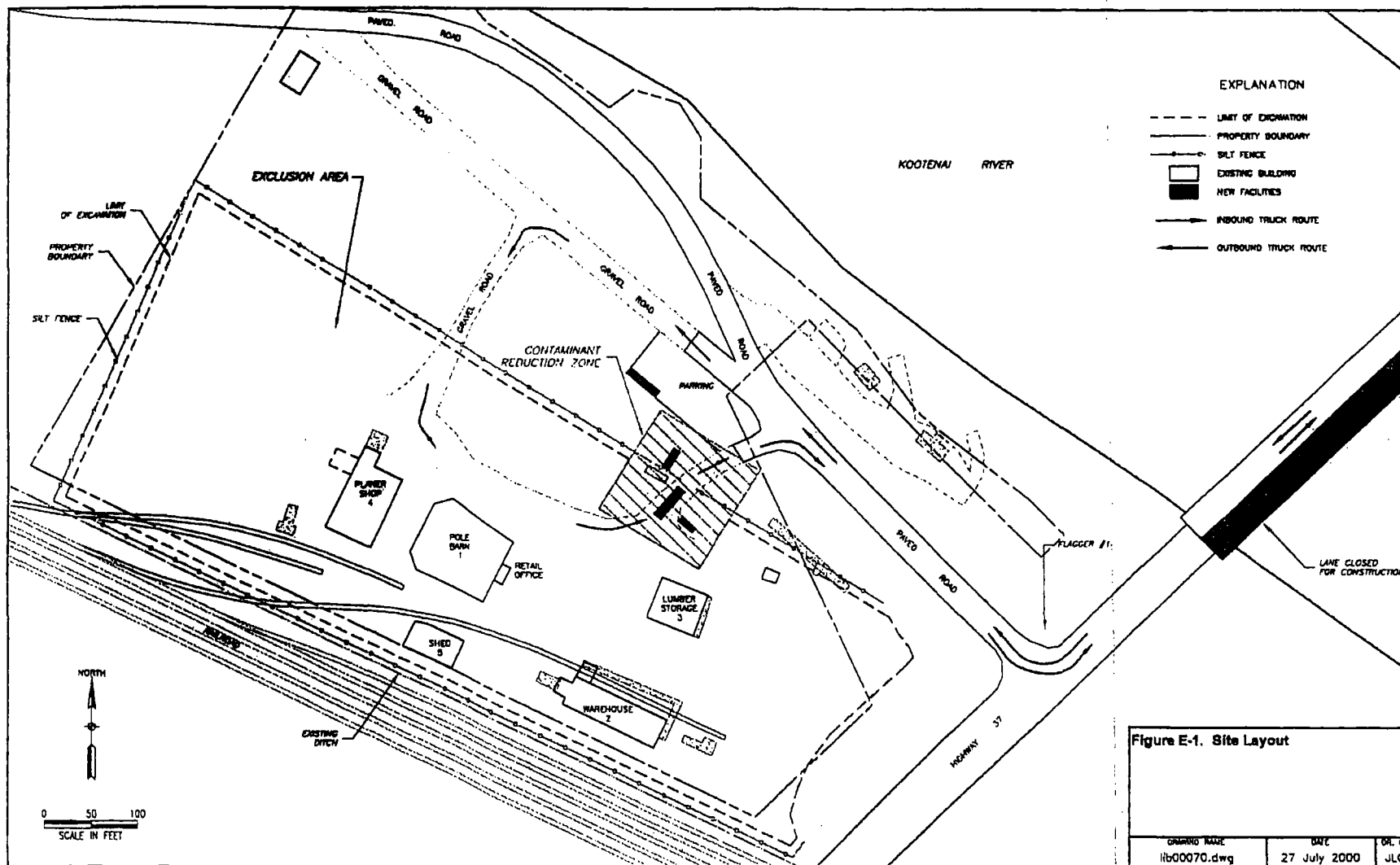


Figure 2-2. Area 1 Building Locations as of July 2000

Taken from the Approved Work Plan, Export Plant Removal Action, Libby, Montana, July 28, 2000.  
Prepared for W.R. Grace and Company by URS.

**TARGET SHEET**  
EPA REGION VIII  
**SUPERFUND DOCUMENT MANAGEMENT SYSTEM**

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- ☐ OTHER
- ☐ NOT AVAILABLE
- ☐ TYPES OF DOCUMENTS NOT TO BE SCANNED  
(Data Packages, Data Validation, Sampling Data, CBI, Chain of Custody)

**DOCUMENT DESCRIPTION:**

FIGURE 2-3 RESULTS OF SOIL SAMPLINGS AND LOCATION OF  
VERMICULITE NOTED DURING REMOVAL ACTIVITIES AT OU 1  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

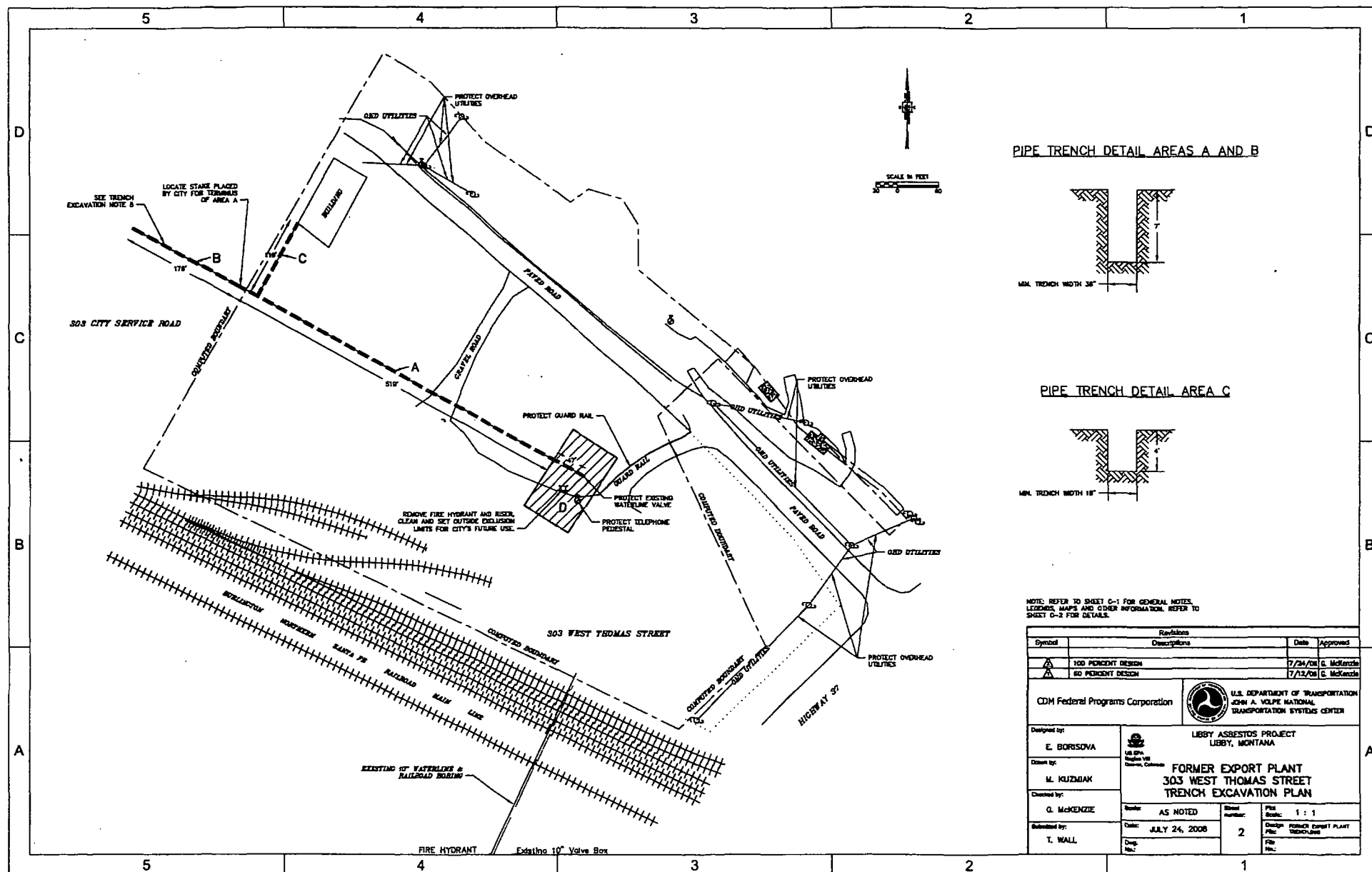


Figure 2-4. Location of the City of Libby Water Pipeline (2006 Installation)

Table 2-1. Area 1 Investigation Soil Sample Results – December 1999

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (inches)	Bottom Depth (inches)	Analytical Results			
												Method	LA Bin	LA (%)	C (%)
E-00001-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00002-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
E-00003-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00004-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
E-00005-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00006-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
E-00007-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00008-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
E-00009-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00010-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
E-00011-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00012-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B2	< 1	ND
E-00013-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00014-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
E-00015-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00016-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B2	< 1	ND
E-00017-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00018-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	C	2	ND
E-00019-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00020-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
E-00021-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	2	ND
E-00022-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	C	2	ND
E-00023-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00024-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B2	< 1	ND
E-00025-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00026-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
E-00027-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00028-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B2	< 1	ND
E-00029-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	2	ND
E-00030-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	C	2	ND
E-00031-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	< 1
E-00032-B	former export plant	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B2	< 1	ND
E-00075-B	former export plant	12/12/1999	Field Duplicate	E-00001	Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00076-B	former export plant	12/12/1999	Field Duplicate	E-00002	Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
E-00077-B	former export plant	12/12/1999	Field Duplicate	E-00003	Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00078-B	former export plant	12/12/1999	Field Duplicate	E-00004	Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
E-00079-B	former export plant	12/12/1999	Field Duplicate	E-00005	Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	< 1
E-00080-B	former export plant	12/12/1999	Field Duplicate	E-00006	Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	< 1
E-00081-B	former export plant	12/12/1999	Field Duplicate	E-00007	Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00082-B	former export plant	12/12/1999	Field Duplicate	E-00008	Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B2	< 1	ND
E-00033-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00034-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
E-00035-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00036-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B2	< 1	ND
E-00037-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00038-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B2	< 1	ND
E-00039-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00040-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
E-00041-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	3	ND
E-00042-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	C	5	ND
E-00043-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00044-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B2	< 1	ND
E-00045-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00046-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00047-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	2	ND

Table 2-1. Area 1 Investigation Soil Sample Results – December 1999

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (inches)	Bottom Depth (inches)	Analytical Results			
												Method	LA Bin	LA (%)	C (%)
E-00048-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00049-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00050-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00053-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00054-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00055-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00056-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00057-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	2	ND
E-00058-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	2	ND
E-00059-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00060-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00061-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00062-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00063-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	3	ND
E-00064-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B2	< 1	ND
E-00065-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00066-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
E-00067-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	24	PLM-9002	A	ND	ND
E-00068-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	24	PLM-9002	A	ND	ND
E-00069-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	24	PLM-9002	A	ND	ND
E-00070-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	24	PLM-9002	A	ND	ND
E-00071-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	24	PLM-9002	A	ND	ND
E-00072-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	24	PLM-9002	A	ND	ND
E-00073-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	24	PLM-9002	B2	< 1	ND
E-00074-B	former export plant	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab	---	0	24	PLM-9002	B2	< 1	ND

**Notes and Definitions:**

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

B suffix in Sample ID = non-processed sample

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

< = less than

Table 2-2. Area 1 Investigation Soil Sample Results – March 2000

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (Inches)	Bottom Depth (Inches)	Analytical Results			
												Method	LA Bin	LA (%)	C (%)
1-00249	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B	< 1	ND
1-00361	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-00362	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B	< 1	ND
1-00363	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-00364	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	5	ND
1-00365	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	C	10	ND
1-00366	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
1-00367	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-00368	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	5	ND
1-00369	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	C	2	ND
1-00370	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B	< 1	ND
1-00371	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
1-00372	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B	< 1	ND
1-00373	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-00374	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B	< 1	ND
1-00375	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
1-00379	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B	< 1	ND
1-00380	former export plant	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	C	2	ND
1-01261	former export plant	3/10/2000	Field Duplicate	1-00249	Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B	< 1	ND
1-01262	former export plant	3/10/2000	Field Duplicate	1-00371	Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-01263	former export plant	3/10/2000	Field Duplicate	1-00375	Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	A	ND	ND
1-01264	former export plant	3/10/2000	Field Duplicate	1-00373	Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-01269	former export plant	3/10/2000	Field Duplicate	1-00361	Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	C	1	ND
1-00381	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B	< 1	ND
1-00382	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-00383	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B	< 1	ND
1-00384	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-00385	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	A	ND	ND
1-00386	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-00387	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	1	ND
1-00388	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-00389	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	1	ND
1-00390	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-00391	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	1	ND
1-00392	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-00393	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	C	1	ND
1-00415	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-00416	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	0	2	PLM-9002	B	< 1	ND
1-00417	former export plant	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	B	< 1	ND
1-00418	former export plant	3/11/2000	Field Sample		Other	Property	SAMPLE FROM BAGS LABELED "VERMICULITE CONCENTRATE" OUTSIDE OF THE SOUTHEASTERNMOST LARGE BUILDING AT THIS BUILDING'S SOUTHWEST CORNER.	Grab	---	---	---	PLM-9002	C	2	ND
1-01266	former export plant	3/11/2000	Field Duplicate	1-00382	Surface soil	Property	Soil	Grab	---	2	12	PLM-9002	C	1	ND

**Notes and Definitions:**

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

&lt; = less than

Table 2-3. Area 1 Stationary Air Sample Results – April 2000

													Analytical Results (Method ISO10312)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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Sample ID	Property Group (Location)	Sample Date	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air = L) or Area (dust = cm <sup>2</sup> )	Grid Openings	Filter Status	Libby Amphibole (LA)								Chrysotile (C)								Other Amphibole (OA)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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													Aspect Ratio <5:1	Length <0.5 u	Dia- meter >0.5 u	Length 0.5 to 5 u	Length 5 to 10 u	Length >10 u	Total Conc. LA	Total Count LA	Aspect Ratio <5:1	Length <0.5 u	Dia- meter >0.5 u	Length 0.5 to 5 u	Length 5 to 10 u	Length >10 u	Total Conc. C	Total Count C	Aspect Ratio <5:1	Length <0.5 u	Dia- meter >0.5 u	Length 0.5 to 5 u	Length 5 to 10 u	Length >10 u	Total Conc. OA	Total Count OA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

Notes and Definitions:  
The report excludes all lab quality control results such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Varied Analysis, etc.  
N/A = not applicable  
L = liters  
cm<sup>2</sup> = square centimeter  
S/cc = Structures per cubic centimeter  
S/cm<sup>2</sup> = Structures per square centimeter  
LA = Libby Amphibole  
C = Chrysotile  
OA = Other Amphibole  
< = less than  
u = micron  
> = greater than



Table 2-4. Area 1 Removal-related Soil Sample Results – October through December 2000

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (Inches)*	Bottom Depth (Inches)*	Analytical Results**			
												Method	LA Bin	LA (%)	C (%)
A-1.5	former export plant	10/25/2000	W.R. Grace Field Sample		Soil	***	Grid A-1.5	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
A-6.10	former export plant	10/25/2000	W.R. Grace Field Sample		Soil	***	Grid A-6.10	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
A-11.15	former export plant	10/25/2000	W.R. Grace Field Sample		Soil	***	Grid A-11.15	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
1R-03363	former export plant	10/25/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid A-11.15	Composite	5	6	14	PLM-9002	A	ND	ND
A-16.20	former export plant	10/25/2000	W.R. Grace Field Sample		Soil	***	Grid A-16.20	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
A-21.25	former export plant	10/25/2000	W.R. Grace Field Sample		Soil	***	Grid A-21.25	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
B-1.5	former export plant	10/31/2000	W.R. Grace Field Sample		Soil	***	Grid B-1.5	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
B-6.10	former export plant	10/31/2000	W.R. Grace Field Sample		Soil	***	Grid B-6.10	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
1R-03377	former export plant	10/31/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid B-6.10	Composite	5	6	14	PLM-9002	A	ND	ND
B-11.15	former export plant	10/31/2000	W.R. Grace Field Sample		Soil	***	Grid B-11.15	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
B-16.20	former export plant	10/31/2000	W.R. Grace Field Sample		Soil	***	Grid B-16.20	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
B-21.25	former export plant	10/31/2000	W.R. Grace Field Sample		Soil	***	Grid B-21.25	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
C-1.5	former export plant	11/3/2000	W.R. Grace Field Sample		Soil	***	Grid C-1.5	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
1R-03389	former export plant	11/3/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid C-1.5	Composite	5	18	22	PLM-9002	A	ND	ND
C-6.10	former export plant	11/3/2000	W.R. Grace Field Sample		Soil	***	Grid C-6.10	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
1R-03390	former export plant	11/3/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid C-6.10	Composite	5	18	22	PLM-9002	A	ND	ND
C-11.15	former export plant	11/3/2000	W.R. Grace Field Sample		Soil	***	Grid C-11.15	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
1R-03391	former export plant	11/3/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid C-11.15	Composite	5	18	22	PLM-9002	A	ND	ND
C-16.20	former export plant	11/3/2000	W.R. Grace Field Sample		Soil	***	Grid C-16.20	Composite	5	16	18	EPA/600/R-93/16	***	0.5	
1R-03392	former export plant	11/3/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid C-16.20	Composite	5	18	22	PLM-9002	B	< 1	ND
C-21.25	former export plant	11/3/2000	W.R. Grace Field Sample		Soil	***	Grid C-21.25	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
1R-03393	former export plant	11/3/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid C-21.25	Composite	5	18	22	PLM-9002	A	ND	ND
D-1.5	former export plant	11/7/2000	W.R. Grace Field Sample		Soil	***	Grid D-1.5	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
D-6.10	former export plant	11/7/2000	W.R. Grace Field Sample		Soil	***	Grid D-6.10	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
D-11.15	former export plant	11/7/2000	W.R. Grace Field Sample		Soil	***	Grid D-11.15	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
1R-03404	former export plant	11/7/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid D-11.15	Composite	5	8	12	PLM-9002	A	ND	ND
D-16.20	former export plant	11/7/2000	W.R. Grace Field Sample		Soil	***	Grid D-16.20	Composite	5	16	18	EPA/600/R-93/16	***	Trace	
D-21.25	former export plant	11/7/2000	W.R. Grace Field Sample		Soil	***	Grid D-21.25	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
Grid E	former export plant	12/4/2000	W.R. Grace Field Sample		Soil	***	Grid E	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
Grid F	former export plant	12/4/2000	W.R. Grace Field Sample		Soil	***	Grid F	Composite	4	16	18	EPA/600/R-93/16	***	0.0	
Grid G	former export plant	11/21/2000	W.R. Grace Field Sample		Soil	***	Grid G	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
Grid H	former export plant	11/20/2000	W.R. Grace Field Sample		Soil	***	Grid H	Composite	5	16	18	EPA/600/R-93/16	***	Trace	
Grid I	former export plant	11/20/2000	W.R. Grace Field Sample		Soil	***	Grid I	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
J-1.5	former export plant	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid J-1.5	Composite	5	16	18	EPA/600/R-93/16	***	0.3	
J-6.10	former export plant	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid J-6.10	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
J-11.15	former export plant	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid J-11.15	Composite	5	16	18	EPA/600/R-93/16	***	< 0.25	
J-16.20	former export plant	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid J-16.20	Composite	5	16	18	EPA/600/R-93/16	***	0.5	
J-21.25	former export plant	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid J-21.25	Composite	5	16	18	EPA/600/R-93/16	***	1.0	
1R-03370	former export plant	10/28/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid J-21.25	Composite	5	12	24	PLM-9002	C	2	ND
1R-03409	former export plant	11/9/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid J-21.25	Composite	5	12	18	PLM-9002	A	ND	ND
K-1.5	former export plant	11/1/2000	W.R. Grace Field Sample		Soil	***	Grid K-1.5	Composite	5	16	18	EPA/600/R-93/16	***	Trace	
K-6.10	former export plant	11/1/2000	W.R. Grace Field Sample		Soil	***	Grid K-6.10	Composite	5	16	18	EPA/600/R-93/16	***	Trace	
K-11.15	former export plant	11/1/2000	W.R. Grace Field Sample		Soil	***	Grid K-11.15	Composite	5	16	18	EPA/600/R-93/16	***	0.8	
K-16.20	former export plant	11/1/2000	W.R. Grace Field Sample		Soil	***	Grid K-16.20	Composite	5	16	18	EPA/600/R-93/16	***	Trace	
K-21.25	former export plant	11/1/2000	W.R. Grace Field Sample		Soil	***	Grid K-21.25	Composite	5	16	18	EPA/600/R-93/16	***	Trace	
1R-03385	former export plant	11/1/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid K-21.25	Composite	5	6	8	PLM-9002	A	ND	ND
L-1.5	former export plant	11/6/2000	W.R. Grace Field Sample		Soil	***	Grid L-1.5	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
L-6.9	former export plant	11/6/2000	W.R. Grace Field Sample		Soil	***	Grid L-6.9	Composite	4	16	18	EPA/600/R-93/16	***	0.0	
1R-03396	former export plant	11/6/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid L-10.13	Composite	4	18	22	PLM-9002	B	< 1	ND
L-14.16	former export plant	11/6/2000	W.R. Grace Field Sample		Soil	***	Grid L-14.16	Composite	3	16	18	EPA/600/R-93/16	***	0.0	
M-1.5	former export plant	11/6/2000	W.R. Grace Field Sample		Soil	***	Grid M-1.5	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
1R-03407	former export plant	11/7/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid M-6.10	Composite	5	0	12	PLM-9002	C	2	ND
1R-03408	former export plant	11/9/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid 2M-6.10	Composite	5	0	18	PLM-9002	A	ND	ND
M-11.16	former export plant	11/6/2000	W.R. Grace Field Sample		Soil	***	Grid M-11.16	Composite	6	16	18	EPA/600/R-93/16	***	0.0	
Grid N	former export plant	12/1/2000	W.R. Grace Field Sample		Soil	***	Grid N	Composite	3	16	18	EPA/600/R-93/16	***	0.0	
Grid O	former export plant	12/4/2000	W.R. Grace Field Sample		Soil	***	Grid O	Composite	5	16	18	EPA/600/R-93/16	***	0.0	

CDM

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Table 2-4

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Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (Inches)*	Bottom Depth (Inches)*	Analytical Results**			
												Method	LA Bin	LA (%)	C (%)
Grid P	former export plant	12/1/2000	W.R. Grace Field Sample		Soil	***	Grid P	Composite	4	16	18	EPA/600/R-93/16	***	0.0	
Grid Q	former export plant	11/20/2000	W.R. Grace Field Sample		Soil	***	Grid Q	Composite	5	16	18	EPA/600/R-93/16	***	Trace	
Grid R	former export plant	11/20/2000	W.R. Grace Field Sample		Soil	***	Grid R	Composite	3	16	18	EPA/600/R-93/16	***	0.0	
S-1.5	former export plant	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid S-1.5	Composite	5	16	18	EPA/600/R-93/16	***	0.3	
1R-03371	former export plant	10/28/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid S-1.5	Composite	5	10	18	PLM-9002	C	2	ND
S-6.10	former export plant	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid S-6.10	Composite	5	16	18	EPA/600/R-93/16	***	2.0	
1R-03372	former export plant	10/28/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid S-6.10	Composite	5	10	18	PLM-9002	C	2	ND
1R-03410	former export plant	11/9/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid 2S-6.10	Composite	5	12	18	PLM-9002	B	< 1	ND
1R-03411	former export plant	11/9/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid 2S-6.10; duplicate of 1R-03411	Composite	5	12	18	PLM-9002	C	2	ND
S-11.15	former export plant	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid S-11.15	Composite	5	16	18	EPA/600/R-93/16	***	0.5	
S-16.20	former export plant	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid S-16.20	Composite	5	16	18	EPA/600/R-93/16	***	0.8	
S-21.25	former export plant	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid S-21.25	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
T-1.5	former export plant	11/2/2000	W.R. Grace Field Sample		Soil	***	Grid T-1.5	Composite	5	16	18	EPA/600/R-93/16	***	Trace	
T-6.10	former export plant	11/2/2000	W.R. Grace Field Sample		Soil	***	Grid T-6.10	Composite	5	16	18	EPA/600/R-93/16	***	Trace	
T-11.15	former export plant	11/2/2000	W.R. Grace Field Sample		Soil	***	Grid T-11.15	Composite	5	16	18	EPA/600/R-93/16	***	Trace	
U-1.4	former export plant	11/6/2000	W.R. Grace Field Sample		Soil	***	Grid U-1.4	Composite	4	16	18	EPA/600/R-93/16	***	0.0	
1R-03401	former export plant	11/6/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid U-1.4	Composite	4	18	22	PLM-9002	A	ND	ND
Grid U	former export plant	12/4/2000	W.R. Grace Field Sample		Soil	***	Grid U	Composite	3	16	18	EPA/600/R-93/16	***	0.0	
Grid V	former export plant	12/1/2000	W.R. Grace Field Sample		Soil	***	Grid V	Composite	5	16	18	EPA/600/R-93/16	***	0.0	
Grid W	former export plant	12/1/2000	W.R. Grace Field Sample		Soil	***	Grid W	Composite	3	16	18	EPA/600/R-93/16	***	0.0	
Grid X	former export plant	12/1/2000	W.R. Grace Field Sample		Soil	***	Grid X	Composite	4	16	18	EPA/600/R-93/16	***	0.0	
Grid Y	former export plant	11/20/2000	W.R. Grace Field Sample		Soil	***	Grid Y	Composite	3	16	18	EPA/600/R-93/16	***	Trace	
Grid Z	former export plant	11/20/2000	W.R. Grace Field Sample		Soil	***	Grid Z	Composite	3	16	18	EPA/600/R-93/16	***	0.0	
Grid AA	former export plant	11/21/2000	W.R. Grace Field Sample		Soil	***	Grid AA	Composite	2	16	18	EPA/600/R-93/16	***	0.0	
Grid AB	former export plant	11/21/2000	W.R. Grace Field Sample		Soil	***	Grid AB	Composite	2	16	18	EPA/600/R-93/16	***	0.0	
South side of railroad tracks	former export plant	12/4/2000	W.R. Grace Field Sample		Soil	***	South side of railroad tracks	Composite	7	0	2	EPA/600/R-93/16	***	< 0.01	

#### Notes and Definitions:

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

W.R. Grace = W.R. Grace and Company

Data for samples collected by W.R. Grace and analyzed by R.J. Lee Group using EPA/600/R-93/16 taken from the *Final Report Removal Activities at the Export Plant, Libby, Montana*. Prepared for W.R. Grace and Company by URS. March 16, 2001.

\* = depths are reported directly from documentation; no attempt is made in this report to rectify discrepancies in samples depths reported by Grace and EPA contractors

\*\* = W.R. Grace field samples analyzed by R.J. Lee Group; splits of W.R. Grace field samples analyzed by EMSL Analytical, which accounts for differences in reporting format

\*\*\* = not reported

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

< = less than

Table 2-5. Area 1 Investigation Soil Sample Results – March/April/August 2001

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (inches)	Bottom Depth (inches)	Analytical Results			
												Method	LA Bin	LA (%)	C (%)
1-01601	former export plant	3/2/2001	Field Sample		Mining waste	Property	northern section of the concrete pad	Grab	---	0	1	PLM-9002	B	< 1	ND
1-01602	former export plant	3/2/2001	Field Sample		Mining waste	Property		Grab	---	0	1	PLM-9002	C	2	ND
1-01603	former export plant	3/2/2001	Field Sample		Mining waste	Property	south wall of bag house on the west side	Grab	---	0	1	PLM-9002	B	< 1	ND
1-02277	former export plant	4/19/2001	Field Duplicate	1-02264	Mining waste	Property	Small shed, Southwest corner	Grab	---	0	6	PLM-9002	C	35	ND
1-02260	former export plant	4/19/2001	Field Sample		Mining waste	Scale Barn	Scale house, North wall	Grab	---	0	6	PLM-9002	B	< 1	ND
1-02261	former export plant	4/19/2001	Field Sample		Mining waste	Warehouse	Warehouse, E. side by door	Grab	---	0	6	PLM-9002	C	2	ND
1-02262	former export plant	4/19/2001	Field Sample		Mining waste	Planer Building	Left side of door, Planer Bldg.	Grab	---	0	6	PLM-9002	C	5	ND
1-02263	former export plant	4/19/2001	Field Sample		Mining waste	Property	Right side of door, building	Grab	---	0	6	PLM-9002	B	< 1	ND
1-02264	former export plant	4/19/2001	Field Sample		Mining waste	Property	Small shed, Southwest corner	Grab	---	0	6	PLM-9002	C	25	ND
1-02206	former export plant	4/24/2001	Field Sample		Surface soil	Property	1 1/2-inch minus grade material from Granite Pit	Grab	---	0	6	PLM-9002	A	ND	ND
1-03398	former export plant	8/8/2001	Field Sample		Surface soil	Property	between building and RR tracks	Composite	3	0	4	PLM-9002	B	< 1	ND
1-03400	former export plant	8/10/2001	Field Sample		Surface soil	Property	boundary sample	Grab	---	0	4	PLM-9002	C	5	ND
1-03401	former export plant	8/10/2001	Field Sample		Surface soil	Property	boundary sample	Grab	---	0	4	PLM-9002	C	3	ND
1-03402	former export plant	8/10/2001	Field Sample		Surface soil	Property	boundary sample	Grab	---	0	4	PLM-9002	C	8	ND
1-03403	former export plant	8/10/2001	Field Sample		Surface soil	Property	boundary sample	Grab	---	0	4	PLM-9002	C	15	ND

**Notes and Definitions:**

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

&lt; = less than

Table 2-6. Area 1 Investigation Bulk Materials Sampling Results – April 2001

Sample ID	Property Group (Location)	Sample Date	Category	Matrix	Sample Group	Location Description (Sub Location)	Media Type	Analytical Results		
								Method	LA (%)	C (%)
1R-04313	former export plant	4/19/2001	Field Sample	Insulation	Planer Shop	Planer Bldg. inside east wall between window seal	Bulk	PLM-9002	< 1	10
1R-04314	former export plant	4/19/2001	Field Sample	Wood	Planer Shop	Planer Bldg. inside south wall truss	Bulk	PLM-9002	ND	ND
1R-04315	former export plant	4/19/2001	Field Sample	Debris	Planer Shop	Planer Bldg. inside west wall b/w window truss	Bulk	PLM-9002	ND	ND
1R-04316	former export plant	4/19/2001	Field Sample	Debris	Planer Shop	Planer Bldg. inside northeast corner wall truss	Bulk	PLM-9002	2	< 1
1R-04317	former export plant	4/19/2001	Field Sample	Insulation	Planer Shop	Planer Bldg. outside east wall, b/w corrugated	Bulk	PLM-9002	< 1	3
1R-04318	former export plant	4/19/2001	Field Sample	Wood & Dust	Planer Shop	Planer Bldg.	Bulk	PLM-9002	< 1	< 1
1R-04319	former export plant	4/19/2001	Field Sample	Debris	Pole Barn	Pole barn - Inside base of elevator	Bulk	PLM-9002	5	< 1
1R-04320	former export plant	4/19/2001	Field Sample	Debris	Pole Barn	Pole barn north wall and floor corner	Bulk	PLM-9002	2	< 1
1R-04401	former export plant	4/19/2001	Field Sample	Debris	Pole Barn	Pole barn west wall and wooden base plate	Bulk	PLM-9002	2	< 1
1R-04402	former export plant	4/19/2001	Field Sample	Debris	Pole Barn	Pole barn south wall and wooden base plate	Bulk	PLM-9002	< 1	< 1
1R-04403	former export plant	4/19/2001	Field Sample	Debris	Pole Barn	Pole barn south roof	Bulk	PLM-9002	ND	ND
1R-04404	former export plant	4/19/2001	Field Sample	Debris	Pole Barn	Pole barn	Bulk	PLM-9002	ND	ND
1R-04405	former export plant	4/19/2001	Field Sample	Debris	Planer Shop	Planer Bldg. holes in floor	Bulk	PLM-9002	ND	ND
1R-04406	former export plant	4/19/2001	Field Sample	Debris	Pole Barn	Pole barn north wall outside on column foundation	Bulk	PLM-9002	< 1	ND
1R-04407	former export plant	4/19/2001	Field Sample	Debris	Shed	Small building entrance gate	Bulk	PLM-9002	< 1	ND
1R-04408	former export plant	4/19/2001	Field Sample	Debris	Shed	Small building west side - wooden base plate	Bulk	PLM-9002	ND	ND
1R-04409	former export plant	4/19/2001	Field Sample	Debris	Shed	Small building south wall wood pieces	Bulk	PLM-9002	ND	ND
1R-04410	former export plant	4/19/2001	Field Sample	Debris	Shed	Small building paint over wood from base plate	Bulk	PLM-9002	ND	ND
1R-04411	former export plant	4/19/2001	Field Sample	Debris	Shed	Small building outside southwest corner molding	Bulk	PLM-9002	< 1	ND
1R-04412	former export plant	4/19/2001	Field Sample	Debris	Shed	Small building outside south wall at door	Bulk	PLM-9002	< 1	ND
1R-04413	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse west wall outside behind elevator	Bulk	PLM-9002	5	ND
1R-04414	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse west wall outside paint chips	Bulk	PLM-9002	< 1	ND
1R-04415	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse northwest corner at outside wall/found.	Bulk	PLM-9002	2	ND
1R-04416	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse north wall outside paint chips	Bulk	PLM-9002	2	ND
1R-04417	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse east wall outside paint chips	Bulk	PLM-9002	< 1	ND
1R-04418	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse east wall outside between wall & foundation	Bulk	PLM-9002	< 1	ND
1R-04419	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse southwest corner below electrical switch	Bulk	PLM-9002	3	ND
1R-04420	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse south wall inside wood shavings	Bulk	PLM-9002	< 1	ND
1R-04421	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse south wall inside near southeast corner	Bulk	PLM-9002	< 1	ND
1R-04422	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse east wall inside	Bulk	PLM-9002	2	ND
1R-04423	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse inside	Bulk	PLM-9002	2	ND
1R-04424	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse north wall inside header of steel door	Bulk	PLM-9002	5	ND
1R-04425	former export plant	4/19/2001	Field Sample	Debris	Warehouse	Warehouse east wall inside - wood shavings	Bulk	PLM-9002	< 1	ND
1R-04426	former export plant	4/19/2001	Field Sample	Debris	Scale Barn/ Lumber Storage	Scale barn north wall inside under windows	Bulk	PLM-9002	< 1	5
1R-04427	former export plant	4/19/2001	Field Sample	Debris	Scale Barn/ Lumber Storage	Scale barn west wall inside	Bulk	PLM-9002	2	ND
1R-04428	former export plant	4/19/2001	Field Sample	Debris	Scale Barn/ Lumber Storage	Scale barn southwest corner (west)	Bulk	PLM-9002	3	ND
1R-04429	former export plant	4/19/2001	Field Sample	Debris	Scale Barn/ Lumber Storage	Scale barn southwest corner (south)	Bulk	PLM-9002	< 1	10
1R-04430	former export plant	4/19/2001	Field Sample	Debris	Scale Barn/ Lumber Storage	Scale barn middle support beam - south paint chips	Bulk	PLM-9002	ND	ND
1R-04431	former export plant	4/19/2001	Field Sample	Debris	Scale Barn/ Lumber Storage	Scale barn northeast corner between outside & beam	Bulk	PLM-9002	< 1	< 1

**Notes and Definitions:**

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

PLM = polarized light microscopy

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

< = less than

Table 2-7. Area 1 Investigation Dust Sample Results – April/August 2001

Sample ID	Property Group (Location)	Sample Date	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Vol (air = L) or Area (dust = S/cm <sup>2</sup> )	Grid Openings	Filter Status	Analytical Results (Method ISO10312) (Air = S/cc; Dust = S/cm <sup>2</sup> )																										
											Libby Amphibole (LA)									Chrysotile (C)									Other Amphibole (OA)								
											Excluded Structures			Structures Detected						Excluded Structures			Structures Detected						Excluded Structures			Structures Detected			Total Conc. OA		
											Aspect Ratio <5:1	Length <0.5 u	Dia- meter >0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length >10 u	Total Conc. LA	Total Count LA	Aspect Ratio <5:1	Length <0.5 u	Dia- meter >0.5 u	Length 0.5 to 5 u	Length 5 to 10 u	Length >10 u	Total Conc. C	Total Count C	Aspect Ratio <5:1	Length <0.5 u	Dia- meter >0.5 u	Length 0.5 to 5 u	Length 5 to 10 u	Length >10 u	Total Conc. OA	Total Count OA			
1R-04432	former export plant	4/19/2001	Warehouse	Large warehouse inside horizontal surfaces	Dust	Building	Field Sample	100	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1R-04433	former export plant	4/19/2001	Warehouse	Large warehouse outside foundation	Dust	Building	Field Sample	100	10		0	0	0	0	169.836	0	169.836	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1-03542	former export plant	8/28/2001	Shed	Small shed	Dust	Building	Field Sample	300	10		12.182	0	26.800	70.655	19.491	0	129.127	53	0	0	0	4.873	0	0	4.873	2	0	0	0	0	0	0	0	0			
1-03543	former export plant	8/28/2001	Building	Pole barn	Dust	Building	Field Sample	300	10		6.091	0	6.091	67.000	12.182	6.091	97.455	16	0	0	0	6.091	0	0	6.091	1	0	0	0	0	0	0	0	0			
1-03544	former export plant	8/28/2001	Property	Connex Box #1	Dust	Building	Field Sample	300	10		0	0	2.436	14.618	2.436	0	19.491	8	0	0	0	2.436	0	0	2.436	1	0	0	0	0	0	0	0	0			
1-03545	former export plant	8/28/2001	Property	Connex Box #2	Dust	Building	Field Sample	300	10		2.436	0	3.045	30.455	3.655	609	40.200	66	0	0	0	1.827	0	0	1.827	3	0	0	0	0	0	0	0	0			

Notes and Definitions:  
The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.  
L = liters  
cm<sup>2</sup> = square centimeter  
S/cc = Structures per cubic centimeter  
S/cm<sup>2</sup> = Structures per square centimeter  
LA = Libby Amphibole  
C = Chrysotile  
OA = Other Amphibole  
< = less than  
u = micron  
> = greater than

Table 2-8. Area 1 Removal-related Dust Sample Results – September/October 2001

Sample ID	Property Group (Location)	Sample Date	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Vol (air = L) or Area (dust = cm <sup>2</sup> )	Grid Openings	Filter Status	Analytical Results (Method ISO10312) (Air = S/cc; Dust = S/cm <sup>2</sup> )																													
											Libby Amphibole (LA)										Chrysotile (C)										Other Amphibole (OA)									
											Excluded Structures					Structures Detected					Excluded Structures					Structures Detected					Excluded Structures					Structures Detected				
											Aspect Ratio <5:1	Length <0.5 u	Dia- meter >0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length >10 u	Total Conc. LA	Total Count LA	Aspect Ratio <5:1	Length <0.5 u	Dia- meter >0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length >10 u	Total Conc. C	Total Count C	Aspect Ratio <5:1	Length <0.5 u	Dia- meter >0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length >10 u	Total Conc. OA	Total Count OA						
1R-09971	former export plant	9/6/2001	Property	Lumber/ Export Plant	Dust	Unknown	Field Sample	300	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
1-Q3552	former export plant	9/15/2001	Property	Lumber piles in exclusion zone	Dust	Unknown	Field Sample	300	10		0	0	0	365	0	365	3	0	0	0	122	0	0	122	1	0	0	0	0	0	0	0	0	0						
1R-10787	former export plant	10/12/2001	Property	Southeast side of Planer Bldg., outside door stoop	Dust	Building	Field Sample	300	10		0	0	85,273	201,000	140,091	18,273	444,636	73	0	0	0	12,182	6,091	6,091	24,364	4	0	0	0	6,091	0	0	6,091	1						
1R-10788	former export plant	10/12/2001	Property	Sawdust exhaust chute outside	Dust	Unknown	Field Sample	300	10		0	0	1,218	2,436	0	0	3,655	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
1R-10789	former export plant	10/12/2001	Property	North side of building, large covered concrete pad	Dust	Building	Field Sample	300	10		0	0	12,182	0	12,182	0	24,364	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
1R-10790	former export plant	10/12/2001	Planer Shop	Planer Bldg. west side cross members, inside	Dust	Building	Field Sample	300	10		0	0	0	7,309	0	7,309	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
1R-10791	former export plant	10/12/2001	Planer Shop	Planer building, lunch room	Dust	Building	Field Sample	300	10		0	0	609	0	0	0	609	1	0	0	0	609	0	0	609	1	0	0	0	0	0	0	0	0						
1R-10792	former export plant	10/12/2001	Planer Shop	Main doorway of planer building	Dust	Building	Field Sample	300	10		6,091	0	18,273	30,455	6,091	6,091	67,000	11	0	0	0	0	6,091	0	6,091	1	0	0	0	0	0	0	0	0						

Notes and Definitions:  
The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.  
L = liters  
cm<sup>2</sup> = square centimeter  
S/cc = Structures per cubic centimeter  
S/cm<sup>2</sup> = Structures per square centimeter  
LA = Libby Amphibole  
C = Chrysotile  
OA = Other Amphibole  
< = less than  
u = micron  
> = greater than

Table 2-9. Area 1 Removal-related Soil Sample Results – October 2001

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (inches)	Bottom Depth (inches)	Analytical Results			
												Method	LA Bin	LA (%)	C (%)
1R-11541	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	N slice of pole barn excavation; split of PB-01-01	Composite	5	16	18	PLM-9002	B	< 1	ND
1R-11542	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of PB-01-02	Composite	5	16	18	PLM-9002	B	< 1	ND
1R-11543	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of PB-01-03	Composite	5	16	18	PLM-9002	B	< 1	ND
1R-11544	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	From bottom of trench; Split of PB-01-04	Composite	5	48	50	PLM-9002	B	< 1	ND
1R-11545	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of PB-01-05	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-11546	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	3 composite points outside of footprint; Split of LW-01-01	Composite	3	16	18	PLM-9002	B	< 1	ND
1R-11547	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	2 composite points outside of footprint; Split of LW-01-02	Composite	2	16	18	PLM-9002	B	< 1	ND
1R-11548	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of LW-01-03	Composite	5	16	18	PLM-9002	B	< 1	ND
1R-11549	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of LW-01-04	Composite	5	16	18	PLM-9002	B	< 1	ND
1R-11550	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of LW-01-05	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-11551	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	East side of excavation area outside of 100 foot by 100 foot gnd; Split of LW-01-06	Composite	5	16	18	PLM-9002	B	< 1	ND
1R-11552	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Loading dock excavation east of lumber warehouse; Split of LW-01-07	Composite	5	44	46	PLM-9002	B	< 1	ND
1R-11553	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of SB-01-01	Composite	4	48	50	PLM-9002	B	< 1	ND
1R-11554	former export plant	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of SB-01-02	Composite	4	48	50	PLM-9002	B	< 1	ND
1R-11555	former export plant	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of EB-01-01	Composite	4	16	18	PLM-9002	B	< 1	ND
1R-11556	former export plant	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of EB-01-02	Composite	4	16	18	PLM-9002	B	< 1	ND
1R-11557	former export plant	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of EB-01-03	Composite	4	16	18	PLM-9002	B	< 1	ND
1R-11558	former export plant	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of EB-01-04	Composite	4	16	18	PLM-9002	B	< 1	ND
1R-11559	former export plant	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of EB-01-05	Composite	5	16	18	PLM-9002	B	< 1	ND
1R-11560	former export plant	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of EB-01-06	Composite	5	16	18	PLM-9002	B	< 1	ND
1R-11601	former export plant	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of EB-01-07	Composite	5	16	18	PLM-9002	B	< 1	ND
1R-11602	former export plant	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of SS-01-01	Composite	5	16	18	PLM-9002	B	< 1	ND
1R-11603	former export plant	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of BN-01-01	Composite	5	16	18	PLM-9002	B	< 1	ND
1R-11604	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of G-01-01	Composite	5	0	2	PLM-9002	A	ND	ND
1R-11605	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of G-01-02	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11606	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of H-01-01	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11607	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of H-01-02	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11608	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of H-01-03	Composite	5	0	2	PLM-9002	A	ND	ND
1R-11609	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of H-01-04	Composite	5	0	2	PLM-9002	A	ND	ND
1R-11610	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of H-01-05	Composite	5	0	2	PLM-9002	A	ND	ND
1R-11611	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of P-01-01	Composite	5	0	2	PLM-9002	A	ND	ND
1R-11612	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of P-01-02	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11613	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of P-01-03	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11614	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of P-01-04	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11615	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Q-01-01	Composite	5	0	2	PLM-9002	A	ND	ND
1R-11616	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Q-01-02	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11617	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Q-01-03	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11618	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Q-01-04	Composite	5	0	2	PLM-9002	A	ND	ND
1R-11619	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Q-01-05	Composite	5	0	2	PLM-9002	A	ND	ND
1R-11620	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Y-01-01	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11901	former export plant	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Z-01-01	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11903	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of ABA-01-01	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11904	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of AC-01-01	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11905	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of CD-01-02	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11906	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of DG-01-01	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11907	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of E-01-01	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11908	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of E-01-02	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11909	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of L01-01	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11910	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of IS-01-01	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11911	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of N-01-01	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11912	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of N-01-02	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11913	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of N-01-03	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11914	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of N-01-04	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11915	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of N-01-05	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11916	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of W-01-01	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11917	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of W-01-02	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11918	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of W-01-03	Composite	5	0	2	PLM-9002	B	< 1	ND

Table 2-9. Area 1 Removal-related Soil Sample Results – October 2001

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (inches)	Bottom Depth (inches)	Analytical Results			
												Method	LA Bin	LA (%)	C (%)
1R-11919	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of X-01-01	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-11920	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of X-01-02	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-12121	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of X-01-03	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-12122	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of X-01-04	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-12123	former export plant	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of X-01-05	Composite	5	0	2	PLM-9002	B	< 1	ND
1R-12124	former export plant	10/16/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Surface from non impacted areas	Composite	5	0	2	PLM-9002	A	ND	ND
1R-12125	former export plant	10/16/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Surface from non impacted areas; North side of site	Composite	5	0	2	PLM-9002	A	ND	ND
1R-12126	former export plant	10/16/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Surface from non impacted areas	Composite	5	0	2	PLM-9002	A	ND	ND
1R-12127	former export plant	10/16/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Surface from non impacted area	Composite	5	0	2	PLM-9002	A	ND	ND
1R-12128	former export plant	10/16/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Surface from non impacted area	Composite	5	0	2	PLM-9002	A	ND	ND
1R-12129	former export plant	10/16/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Surface from non impacted area	Composite	5	0	2	PLM-9002	A	ND	ND
1R-12130	former export plant	10/16/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Depth from impacted area	Grab	---	8	10	PLM-9002	B	< 1	ND
1R-12131	former export plant	10/16/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Depth from non impacted area	Grab	---	8	10	PLM-9002	B	< 1	ND

**Notes and Definitions:**

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

W.R. Grace =

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

< = less than



Table 2-10. Area 1 Investigation Bulk Materials Sample Results – April 2002

Sample ID	Property Group (Location)	Sample Date	Category	Matrix	Sample Group	Location Description (Sub Location)	Media Type	Analytical Results		
								Method	LA (%)	C (%)
1-06787	former export plant	4/9/2002	Field Sample	Wood & Dust	Lumber Yard	Cyclone intake motor housing	Bulk	PLM-9002	ND	ND
1-06788	former export plant	4/9/2002	Field Sample	Wood & Dust	Lumber Yard	Cyclone interior	Bulk	PLM-9002	ND	ND

**Notes and Definitions:**

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

PLM = polarized light microscopy

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

< = less than

Table 2-11. Area 1 Investigation Soil Sample Results – May 2002

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (inches)	Bottom Depth (inches)	Analytical Results			
												Method	LA Bin	LA (%)	C (%)
1R-13766	former export plant	5/8/2002	Field Sample		Surface soil	Property	Area surrounding connex boxes	Composite	3	0	2	PLM-9002	B	<1	ND
1R-13767	former export plant	5/8/2002	Field Sample		Surface soil	Property	Area near railroad tracks	Composite	3	0	1	PLM-9002	B	<1	ND

**Notes and Definitions:**

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LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

< = less than

Table 2-12. Area 1 Removal-related Soil Sample Results – December 2002

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (Inches)	Bottom Depth (Inches)	Analytical Results			
												Method	LA Bin	LA (%)	C (%)
1R-13769	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-1	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-13770	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-2	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-13771	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-3	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-13772	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-4	Composite	5	18	20	PLM-9002	A	ND	ND
1R-13773	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-5	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-13774	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-6	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-13775	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-7	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-13776	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-8	Composite	5	18	20	PLM-9002	A	ND	ND
1R-13777	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-9	Composite	5	18	20	PLM-9002	A	ND	ND
1R-13778	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-10	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-13779	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-11	Composite	5	72	74	PLM-9002	B	< 1	ND
1R-13780	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-12	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17381	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	EXP-13	Composite	5	18	20	PLM-9002		*	*
1R-17382	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	EXP-14	Composite	5	18	20	PLM-9002		*	*
1R-17383	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	EXP-15	Composite	5	18	20	PLM-9002		*	*
1R-17384	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	EXP-16	Composite	5	18	20	PLM-9002		*	*
1R-17385	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	EXP-17	Composite	5	18	20	PLM-9002		*	*
1R-17386	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	EXP-18	Composite	5	18	20	PLM-9002		*	*
1R-17387	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	EXP-19	Composite	5	18	20	PLM-9002		*	*
1R-17388	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	EXP-20	Composite	5	18	20	PLM-9002		*	*
1R-17389	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-21	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17390	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-22	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-17391	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-23	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17392	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-24	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17393	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-25	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17394	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-41	Composite	5	36	38	PLM-9002	B	< 1	ND
1R-17395	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-27	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-17396	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-29	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-17397	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-32	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17398	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-36	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17399	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-40	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17400	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-39	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17401	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-38	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-17402	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-37	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17403	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-33	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17404	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-34	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17405	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-35	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17406	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-31	Composite	5	18	20	PLM-9002	B	< 1	ND
1R-17407	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-30	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17408	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-28	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17409	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Exp-26	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17410	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Driveway	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17411	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property	Drive on S side of site	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17412	former export plant	12/3/2002	W.R. Grace Field Sample		Subsurface soil	Property/ Excavation	Bottom of Waterline Hole	Composite	5	120	122	PLM-9002	A	ND	ND

**Notes and Definitions:**

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W.R. Grace = W.R. Grace and Company

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

< = less than

\* = archived samples; results not available

CDM

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Table 2-13. Investigation Soil Sample Results – June 2006

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (inches)	Bottom Depth (inches)	Analytical Results			
												Method	LA Bin	LA (%)	C (%)
1-08278-B	former export plant	6/9/2006	Field Sample		Surface soil	Stockpile	Field	Composite	5	0	2	PLM-9002	B2	< 1	ND
1-08279-B	former export plant	6/9/2006	Field Sample		Surface soil	Stockpile	Field	Composite	5	0	2	PLM-9002	A	ND	ND
1-08280-B	former export plant	6/9/2006	Field Sample		Surface soil	Stockpile	Field	Composite	5	0	2	PLM-9002	A	ND	ND
1-08281-B	former export plant	6/9/2006	Field Sample		Surface soil	Stockpile	Field	Composite	5	0	2	PLM-9002	A	ND	ND
1-08282-B	former export plant	6/9/2006	Field Sample		Surface soil	Field	Field	Composite	5	0	2	PLM-9002	C	2	ND
1-08283-B	former export plant	6/9/2006	Field Sample		Surface soil	Field	Field	Composite	5	0	2	PLM-9002	C	3	ND
1-08284-B	former export plant	6/9/2006	Field Sample		Surface soil	Field	Field	Composite	5	0	2	PLM-9002	C	1	ND
1-08285-B	former export plant	6/9/2006	Field Sample		Surface soil	Field	Field	Composite	5	0	2	PLM-9002	C	1	ND

**Notes and Definitions:**

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

B suffix in Sample ID = non-processed sample

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

< = less than

Table 2-14. Area 2 Investigation Soil Sample Results – May/July 2003

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (Inches)	Bottom Depth (Inches)	Analytical Results				
												Method	LA Bin	LA (%)	C (%)	
1-07851	Riverside Park	5/22/2003	Field Sample		Surface soil	Property	On ramp-concrete pad area closest to river	Composite	5	0	1	PLM-9002	A	ND		ND
1-07852	Riverside Park	5/22/2003	Field Sample		Surface soil	Property	On ramp-middle asphalt area	Composite	5	0	1	PLM-9002	A	ND		ND
1-07853	Riverside Park	5/22/2003	Field Sample		Surface soil	Property	On ramp-top asphalt area	Composite	5	0	1	PLM-9002	A	ND		ND
1-07731-FG1	Riverside Park	7/19/2003	Field Sample		Surface soil	Driveway	north and south edges of concrete pad	Composite	5	0	6	PLM-VE	B2	< 1		ND
1-07732-FG1	Riverside Park	7/19/2003	Field Sample		Surface soil	Driveway	east of concrete pad	Composite	5	0	6	PLM-VE	B1	TR		ND

**Notes and Definitions:**

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

FG1 suffix in Sample ID = fine ground sample portion

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

PLM-VE = visual estimation method

< = less than

Table 2-15. Area 2 Pre-removal Soil Sample Results – September/October 2003

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (Inches)	Bottom Depth (Inches)	Analytical Results			
												Method	LA Bin	LA (%)	C (%)
CS-16686-FG	Riverside Park	9/9/2003	Field Sample		Surface soil	Park	Area SS1	Composite	5	0	6	PLM-VE	B1	TR	ND
CS-16687-FG	Riverside Park	9/9/2003	Field Sample		Surface soil	Park	Area SS2	Composite	5	0	6	PLM-VE	A	ND	ND
CS-16688-FG	Riverside Park	9/9/2003	Field Sample		Surface soil	Park	Area SS3	Composite	5	0	6	PLM-VE	A	ND	ND
CS-16689-FG	Riverside Park	9/9/2003	Field Sample		Surface soil	Park	Area SS4	Composite	4	0	6	PLM-VE	A	ND	ND
CS-16690-FG	Riverside Park	9/9/2003	Field Duplicate	CS-16689	Surface soil	Park	Area SS4	Composite	4	0	6	PLM-VE	B1	TR	ND
CS-16691-FG	Riverside Park	9/9/2003	Field Sample		Surface soil	Park	Area SS5	Composite	5	0	6	PLM-VE	B1	TR	ND
CS-16692-FG	Riverside Park	9/9/2003	Field Sample		Surface soil	Park	Area SS6	Composite	5	0	6	PLM-VE	A	ND	ND
CS-16693-FG	Riverside Park	9/9/2003	Field Sample		Surface soil	Park	Area SS7	Composite	5	0	6	PLM-VE	A	ND	ND
CS-16694-FG	Riverside Park	9/9/2003	Field Sample		Surface soil	Park	Area RS2	Composite	5	0	6	PLM-VE	A	ND	ND
CS-16695-FG	Riverside Park	9/9/2003	Field Sample		Surface soil	Park	Area RS5	Composite	5	0	6	PLM-VE	A	ND	ND
CS-16696-FG	Riverside Park	9/9/2003	Field Sample		Surface soil	Park	Area RS6	Composite	5	0	6	PLM-VE	A	ND	ND
CS-16698-FG	Riverside Park	9/10/2003	Field Sample		Subsurface soil	Park	Area TP1	Grab		36	38	PLM-VE	A	ND	ND
CS-16699-FG	Riverside Park	9/10/2003	Field Sample		Subsurface soil	Park	Area TP2	Grab		36	39	PLM-VE	A	ND	ND
CS-16700-FG	Riverside Park	9/10/2003	Field Sample		Subsurface soil	Park	Area TP3	Grab		14	16	PLM-VE	A	ND	ND
CS-16821-FG	Riverside Park	9/10/2003	Field Sample		Subsurface soil	Park	Area TP3A	Grab		36	38	PLM-VE	A	ND	ND
CS-16835-FG	Riverside Park	9/12/2003	Field Sample		Subsurface soil	Park	TP4	Grab		36	38	PLM-VE	A	ND	ND
CS-16836-FG	Riverside Park	9/12/2003	Field Sample		Subsurface soil	Park	TP4-A	Grab		36	38	PLM-VE	A	ND	ND
CS-16837-FG	Riverside Park	9/12/2003	Field Sample		Subsurface soil	Park	TP5	Grab		12	18	PLM-VE	A	ND	ND
CS-16838-FG	Riverside Park	9/12/2003	Field Sample		Subsurface soil	Park	TP8	Grab		36	38	PLM-VE	A	ND	ND
CS-16839-FG	Riverside Park	9/12/2003	Field Sample		Subsurface soil	Park	TP6	Grab		36	38	PLM-VE	B1	TR	ND
CS-16840-FG	Riverside Park	9/12/2003	Field Duplicate	CS-16839	Subsurface soil	Park	TP6	Grab		36	38	PLM-VE	B1	TR	ND
CS-16841-FG	Riverside Park	9/12/2003	Field Sample		Subsurface soil	Park	TP11	Grab		36	38	PLM-VE	A	ND	ND
CS-16842-FG	Riverside Park	9/12/2003	Field Sample		Subsurface soil	Park	TP1A	Grab		36	38	PLM-VE	A	ND	ND
CS-16843-FG	Riverside Park	9/12/2003	Field Sample		Subsurface soil	Park	TP10	Grab		36	38	PLM-VE	A	ND	ND
CS-16844-FG	Riverside Park	9/12/2003	Field Sample		Subsurface soil	Park	TP9	Grab		12	14	PLM-VE	A	ND	ND
CS-16845-FG	Riverside Park	9/12/2003	Field Sample		Subsurface soil	Park	TP7	Grab		14	16	PLM-VE	A	ND	ND
CS-16846-FG	Riverside Park	9/12/2003	Field Sample		Subsurface soil	Park	TP6A	Grab		36	38	PLM-VE	A	ND	ND
CS-16848-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E1	Composite	5	0	6	PLM-VE	B1	TR	ND
CS-16849-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E2	Composite	5	0	6	PLM-VE	A	ND	ND
CS-16850-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E3	Composite	5	0	6	PLM-VE	B1	TR	ND
CS-16851-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E4	Composite	5	0	6	PLM-VE	A	ND	ND
CS-16852-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E4	Composite	5	0	6	PLM-VE	A	ND	ND
CS-16853-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E5	Composite	5	0	6	PLM-VE	A	ND	ND
CS-16854-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E6	Composite	5	0	6	PLM-VE	A	ND	ND
CS-16855-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E7	Composite	5	0	6	PLM-VE	B1	TR	ND
CS-16856-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E8	Composite	5	0	6	PLM-VE	B1	TR	ND
CS-16857-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E9	Composite	5	0	6	PLM-VE	B1	TR	ND
CS-16858-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E10	Composite	5	0	6	PLM-VE	B2	< 1	ND
CS-16859-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E11	Composite	5	0	6	PLM-VE	B1	TR	ND
CS-16860-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E12	Composite	5	0	6	PLM-VE	B1	TR	ND
CS-16861-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E13	Composite	5	0	6	PLM-VE	B1	TR	ND
CS-16862-FG	Riverside Park	9/13/2003	Field Sample		Surface soil	Park	Area E14	Composite	5	0	6	PLM-VE	B1	TR	ND
CS-17477-FG1	Riverside Park	10/23/2003	Field Sample		Subsurface soil	Park	Test pit 12	Grab	---	35	38	PLM-VE	B1	TR	ND

**Notes and Definitions:**

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

FG/FG1 suffix in Sample ID = fine ground sample portion

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

PLM = polarized light microscopy

PLM-VE = visual estimation method

< = less than

Table 2-16. Area 2 Removal-related Soil Sample Results – October/November 2003

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (inches)	Bottom Depth (inches)	Analytical Results			
												Method	LA Bin	LA (%)	C (%)
1R-23244-B	Riverside Park	10/2/2003	Field Sample		Surface soil	Park	Grid 38	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-21994-B	Riverside Park	10/6/2003	Field Sample		Surface soil	Park	Grid 37	Composite	5	36	38	PLM-9002	A	ND	ND
1R-21995-B	Riverside Park	10/6/2003	Field Sample		Surface soil	Park	Grid 53	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-21996-B	Riverside Park	10/7/2003	Field Sample		Surface soil	Park	Grid 37 - resample of 1R-21994 at the discretion of the CDM site manager	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-21997-B	Riverside Park	10/7/2003	Field Sample		Surface soil	Park	Grids 34/35	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-21998-B	Riverside Park	10/7/2003	Field Sample		Surface soil	Park	Grid 53	Composite	6	36	38	PLM-9002	B2	< 1	ND
1R-21999-B	Riverside Park	10/8/2003	Field Sample		Surface soil	Park	Grid 32	Composite	5	12	14	PLM-9002	A	ND	ND
1R-22000-B	Riverside Park	10/8/2003	Field Sample		Surface soil	Park	Grid 36	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23245-B	Riverside Park	10/8/2003	Field Sample		Surface soil	Park	Grid 33	Composite	5	36	38	PLM-9002	A	ND	ND
1R-23246-B	Riverside Park	10/9/2003	Field Sample		Surface soil	Park	Grid 31	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23247-B	Riverside Park	10/9/2003	Field Sample		Surface soil	Park	Grid 30	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23248-B	Riverside Park	10/9/2003	Field Sample		Surface soil	Park	slice in between Grids 30 and 32, just south of dirt approach to new boat ramp	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23249-B	Riverside Park	10/13/2003	Field Sample		Surface soil	Park	Grid 29	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23250-B	Riverside Park	10/13/2003	Field Sample		Surface soil	Park	Grid 28	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23251-B	Riverside Park	10/13/2003	Field Sample		Surface soil	Park	Grid 27	Composite	5	36	38	PLM-9002	A	ND	ND
1R-23252-B	Riverside Park	10/13/2003	Field Sample		Surface soil	Park	Grid 52	Composite	5	36	38	PLM-9002	A	ND	ND
1R-23253-B	Riverside Park	10/15/2003	Field Sample		Surface soil	Park	Grid 26	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23254-B	Riverside Park	10/15/2003	Field Sample		Surface soil	Park	Grid 25	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23255-B	Riverside Park	10/15/2003	Field Sample		Surface soil	Park	Grid 23/24	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23256-B	Riverside Park	10/15/2003	Field Sample		Surface soil	Park	Grid 52	Composite	5	36	38	PLM-9002	A	ND	ND
1R-23257-B	Riverside Park	10/16/2003	Field Sample		Surface soil	Park	Grids 19/20	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23258-B	Riverside Park	10/16/2003	Field Sample		Surface soil	Park	Grid 51	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23259-B	Riverside Park	10/20/2003	Field Sample		Surface soil	Park	Grid 16	Composite	5	36	38	PLM-9002	A	ND	ND
1R-23260-B	Riverside Park	10/20/2003	Field Sample		Surface soil	Park	Grid 51	Composite	5	36	38	PLM-9002	A	ND	ND
1R-23741-B	Riverside Park	10/20/2003	Field Sample		Surface soil	Park	Grid 13	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23742-B	Riverside Park	10/20/2003	Field Sample		Surface soil	Park	Grid 50	Composite	5	36	38	PLM-9002	A	ND	ND
1R-23743-B	Riverside Park	10/20/2003	Field Sample		Surface soil	Park	Grid 10	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23744-B	Riverside Park	10/20/2003	Field Sample		Surface soil	Park	Grid 50	Composite	5	36	38	PLM-9002	A	ND	ND
1R-23745-B	Riverside Park	10/22/2003	Field Sample		Surface soil	Park	Grid 49	Composite	5	36	38	PLM-9002	A	ND	ND
1R-23746-B	Riverside Park	10/22/2003	Field Sample		Surface soil	Park	Grid 49	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23751-B	Riverside Park	10/23/2003	Field Sample		Surface soil	Park	Grid 7	Composite	5	36	38	PLM-9002	A	ND	ND
1R-23752-B	Riverside Park	10/23/2003	Field Sample		Surface soil	Park	Grid 4	Composite	5	36	38	PLM-9002	A	ND	ND
1R-23753-B	Riverside Park	10/24/2003	Field Sample		Surface soil	Park	Grid 1	Composite	5	30	32	PLM-9002	B2	< 1	ND
1R-23754-B	Riverside Park	10/24/2003	Field Sample		Surface soil	Park	Grid 49	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23755-B	Riverside Park	10/27/2003	Field Sample		Surface soil	Park	Grid 2	Composite	5	18	20	PLM-9002	A	ND	ND
1R-23756-B	Riverside Park	10/27/2003	Field Sample		Surface soil	Park	Grid 3	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23757-B	Riverside Park	10/27/2003	Field Sample		Surface soil	Park	Grid 6	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23758-B	Riverside Park	10/27/2003	Field Sample		Surface soil	Park	Grid 5	Composite	5	24	26	PLM-9002	A	ND	ND
1R-23759-B	Riverside Park	10/28/2003	Field Sample		Surface soil	Park	Grid 9	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23760-B	Riverside Park	10/28/2003	Field Sample		Surface soil	Park	Grid 8	Composite	5	24	26	PLM-9002	A	ND	ND
1R-24081-B	Riverside Park	10/28/2003	Field Sample		Surface soil	Park	Grid 12	Composite	5	12	14	PLM-9002	A	ND	ND
1R-24082-B	Riverside Park	10/28/2003	Field Sample		Surface soil	Park	Grid 11	Composite	5	18	20	PLM-9002	A	ND	ND
1R-24083-B	Riverside Park	10/28/2003	Field Sample		Surface soil	Park	Grid 36	Composite	5	12	14	PLM-9002	A	ND	ND
1R-24084-B	Riverside Park	10/29/2003	Field Sample		Surface soil	Park	Grid 15	Composite	5	12	14	PLM-9002	A	ND	ND
1R-24085-B	Riverside Park	10/29/2003	Field Sample		Surface soil	Park	Grid 14	Composite	5	18	20	PLM-9002	A	ND	ND
1R-24086-B	Riverside Park	10/30/2003	Field Sample		Surface soil	Park	Grid 36	Composite	5	12	14	PLM-9002	B2	< 1	ND
1R-24087-B	Riverside Park	10/31/2003	Field Sample		Surface soil	Park	Grid 18	Composite	5	18	20	PLM-9002	A	ND	ND
1R-24088-B	Riverside Park	10/31/2003	Field Sample		Surface soil	Park	Grid 17	Composite	5	18	20	PLM-9002	A	ND	ND
1R-24089-B	Riverside Park	10/31/2003	Field Sample		Surface soil	Park	Grid 22	Composite	5	12	14	PLM-9002	A	ND	ND
1R-24090-B	Riverside Park	10/31/2003	Field Sample		Surface soil	Park	Grid 21	Composite	5	18	20	PLM-9002	A	ND	ND
1R-24091-B	Riverside Park	11/5/2003	Field Sample		Surface soil	Park	Grid 37	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-24092-B	Riverside Park	11/5/2003	Field Sample		Surface soil	Park	Grids 38/42	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-24093-B	Riverside Park	11/7/2003	Field Sample		Surface soil	Park	Grids 41/44	Composite	5	36	38	PLM-9002	A	ND	ND
1R-24094-B	Riverside Park	11/7/2003	Field Sample		Surface soil	Park	Grids 46/47/48	Composite	5	24	26	PLM-9002	A	ND	ND
1R-24096-B	Riverside Park	11/11/2003	Field Sample		Surface soil	Park	Grid 39	Composite	5	36	38	PLM-9002	C	2	ND
1R-24097-B	Riverside Park	11/11/2003	Field Sample		Surface soil	Park	Grids 43/45	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-24098-B	Riverside Park	11/11/2003	Field Sample		Surface soil	Park	Grid 40	Composite	5	12	14	PLM-9002	A	ND	ND

Table 2-16. Area 2 Removal-related Soil Sample Results – October/November 2003

Sample ID	Property Group (Location)	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (inches)*	Bottom Depth (inches)*	Analytical Results			
												Method	LA Bin	LA (%)	C (%)
1R-24099-B	Riverside Park	11/13/2003	Field Sample		Surface soil	Park	Grids 43/45 - resample of 1R-24097 due to proximity to 1R-24096; no visible vermiculite noted in sample	Composite	5	36	38	PLM-9002	82	< 1	ND
1R-24100-B	Riverside Park	11/13/2003	Field Sample		Surface soil	Park	Grid 39 - resample of 1R-24096 due to sample results; no visible vermiculite noted in sample	Composite	5	36	38	PLM-9002	82	< 1	ND

**Notes and Definitions:**

The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

\*Sample depths were recorded in relation to the surface of the excavation rather than in relation to ground surface. Actual excavation and sample depths ranged from 6 to 36 inches below ground surface (refer to Figure 1-6).

B suffix in Sample ID = non-processed sample

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

< = less than



**Appendix A**  
**Personal and Stationary Air Monitoring**  
**Data Collected During OU1 Removal and**  
**Response Activities as of April 27, 2007**

**Note:** The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

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Sample ID	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=L) Area (dust=cm²)	Sample Date	Grid Open Ings	Filter Status Non Analyzed	ISO Concentrations (Air = structures/cc)(Dust = structures/cm³) (METHOD - ISO 10312)																																			
														Libby Amphiboles ( LA )										Chrysotile ( C )										Other Amphiboles ( OA )															
														Excluded Structures					Structures Detected					Total Conc. LA	Total Count LA	Excluded Structures					Structures Detected					Total Conc. C	Total Count C	Excluded Structures					Structures Detected					Total Conc. OA	Total Count OA
														Aspect Ratio 5:1	Length < 0.5 u	Dia- meter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Aspect Ratio 5:1	Length < 0.5 u	Dia- meter > 0.5u	Length 0.5 to 5 u			Length 5 to 10 u	Length > 10 u	Aspect Ratio 5:1	Length < 0.5 u	Dia- meter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Aspect Ratio 5:1	Length < 0.5 u			Dia- meter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u								
1R-12727		303 W Thomas St	EXP-1	EXP-1	Air	Outdoor	Stationary	Field Sample	N/A	1471	10/24/2001	10		0	0	0	0.0024	0	0	0.0024	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-12728		303 W Thomas St	EXP-2	EXP-2	Air	Outdoor	Stationary	Field Sample	N/A	1474	10/24/2001	10		0.0024	0	0	0	0	0	0.0024	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-12729		303 W Thomas St	WRGrace	EXP-3	Air	Outdoor	Stationary	Field Sample	N/A	1471	10/24/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-12730		303 W Thomas St	EXP-4	EXP-4	Air	Outdoor	Stationary	Field Sample	N/A	1477	10/24/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-12731		303 W Thomas St	EXP-5	EXP-5	Air	Outdoor	Stationary	Field Sample	N/A	1477	10/24/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-12732		303 W Thomas St	EXP-6	EXP-6	Air	Outdoor	Stationary	Field Sample	N/A	1474	10/24/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-12733		303 W Thomas St	EXP-7	EXP-7	Air	Outdoor	Stationary	Field Sample	N/A	1471	10/24/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-12734		303 W Thomas St	EXP-8	EXP-8	Air	Outdoor	Stationary	Field Sample	N/A	1471	10/24/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-12735		303 W Thomas St	Blank	NA	Air	N/A	Stationary	Field Sample	N/A	1487	10/24/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-04593	Planar set-up	303 W Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Blank	N/A		10/24/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
1-04594	Planar set-up	303 W Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	66	11/16/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-04595	Wood pull-stacking	303 W Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	68	11/16/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-04596	Wood feed	303 W Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	235	11/16/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-04597	Wood feed	303 W Thomas St	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	238	11/16/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-04597	Wood pull-stacking	303 W Thomas St	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	239	11/16/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-04598	Wood feed	303 W Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	235	11/16/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-04599	Planar set-up	303 W Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	219	11/16/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-04600		303 W Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		11/16/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-04242		303 W Thomas St	Planer Building	Adjacent lunch room	Air	Indoor	Stationary	Field Sample	N/A	1488	12/10/2001	10		0.0024	0	0	0	0	0	0.0024	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-04243		303 W Thomas St	Planer Building	NA	Air	N/A	Personal	Field Blank	N/A		12/10/2001	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13881		303 W Thomas St	Property	Lunch room	Air	Indoor	Stationary	Field Sample	N/A	1254	2/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13882		303 W Thomas St	Property	South wall	Air	Indoor	Stationary	Field Sample	N/A	1274	2/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13883		303 W Thomas St	Property	West wall	Air	Indoor	Stationary	Field Sample	N/A	1303	2/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13884		303 W Thomas St	Property	East wall	Air	Indoor	Stationary	Field Sample	N/A	1313	2/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13911		303 W Thomas St	Property	North wall of Planer Bldg	Air	Indoor	Stationary	Field Sample	Clear	1325	3/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13912		303 W Thomas St	Property	East wall of Planer Bldg	Air	Indoor	Stationary	Field Sample	Clear	1309	3/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13913		303 W Thomas St	Property	South wall of Planer Bldg	Air	Indoor	Stationary	Field Sample	Clear	1370	3/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13937		303 W Thomas St	Property	West end	Air	Indoor	Stationary	Field Sample	N/A	1353	4/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13938		303 W Thomas St	Property	South End	Air	Indoor	Stationary	Field Sample	N/A	1358	4/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13938		303 W Thomas St	Property	East End	Air	Indoor	Stationary	Field Sample	N/A	1367	4/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13940		303 W Thomas St	Property	North End	Air	Indoor	Stationary	Field Sample	N/A	1381	4/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-06871		303 W Thomas St	Property	Northeast corner	Air	Indoor	Stationary	Field Sample	N/A	1209	5/14/2002	10		0	0	0	0.0054	0	0.0054	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-06872		303 W Thomas St	Property	Southeast corner	Air	Indoor	Stationary	Field Sample	N/A	1200	5/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-06873		303 W Thomas St	Property	Southwest corner	Air	Indoor	Stationary	Field Sample	N/A	1200	5/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1-06874		303 W Thomas St	Property	Northwest corner	Air	Indoor	Stationary	Field Sample	N/A	1200	5/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13967	Cleaning planar	303 W Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	70	5/30/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
1R-13977																																																	

## Appendix A - Personal and Stationary Air Monitoring Data Collected During OU1 Removal and Response Activities as of April 27, 2007

Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

Sample ID	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Closer	Vol (air=LY Area (dust=cm <sup>3</sup> ))	Sample Date	PCM (METHOD - NIOSH 7400)	AHERA / ASTM 5755																		
													Fibers/CC	Filter Status Non Analyzed	Libby Amphiboles ( LA )				Chrysotile ( C )				Other Amphiboles ( OA )				Total Asbestos				
															S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	Asbestos Type Identified	S<5u	S>5u	Asb conc (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	
1R-04551	Vacuum Planar Building	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	371	5/9/2001	0.011																UNK	0	0	< 0.00800
1R-04552	Vacuum Planar Building	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	5/9/2001	< 0.043																UNK	0	0	< 0.04740
1R-04553	Vacuum Planar Building	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	371	5/9/2001	0.017																UNK	0	0	< 0.00800
1R-04554	Vacuum Planar Building	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	5/9/2001	< 0.043																UNK	0	0	< 0.04740
1R-04561		303 W. Thomas St	Planer Building	North side of Planer Bldg	Air	Indoor	Stationary	Field Sample	N/A	1356	5/9/2001	< 0.002																UNK	0	0	< 0.00440
1R-04562		303 W. Thomas St	Planer Building	South side of Planer Bldg	Air	Indoor	Stationary	Field Sample	N/A	1347	5/9/2001	< 0.002																UNK	0	0	< 0.00440
1R-04564		303 W. Thomas St	Planer Building	NA	Air	N/A	Personal	Field Blank	N/A		5/9/2001																	UNK	0	0	
1R-04557	Vacuum Planar Building, Export Plant	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	201	5/10/2001	0.032																UNK	0	0	< 0.01480
1R-04558	Vacuum Planar Building, Export Plant	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	5/10/2001	0.056																UNK	0	0	< 0.04890
1R-04559	Vacuum Planar Building, Export Plant	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	201	5/10/2001	0.02																UNK	0	0	< 0.01480
1R-04560	Vacuum Planar Building, Export Plant	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	5/10/2001	< 0.044																TREM	0	1	< 0.04890
1R-04577		303 W. Thomas St	Planer Building	North side of Planer Bldg	Air	Indoor	Stationary	Field Sample	Clear	1737	5/10/2001	< 0.002																UNK	0	0	< 0.00500
1R-04578		303 W. Thomas St	Planer Building	South side of Planer Bldg	Air	Indoor	Stationary	Field Sample	N/A	1728	5/10/2001	< 0.002																UNK	0	0	< 0.00500
1R-04579		303 W. Thomas St	Planer Building	NA	Air	N/A	Stationary	Field Blank	N/A		5/10/2001																	UNK	0	0	
1R-04608		303 W. Thomas St	Planer Building	South side of Planer Bldg	Air	Indoor	Stationary	Field Sample	N/A	1102	5/14/2001	0.003																UNK	0	0	< 0.00450
1R-04609		303 W. Thomas St	Planer Building	NA	Air	N/A	Personal	Field Blank	N/A		5/14/2001																	UNK	0	0	
1R-04611		303 W. Thomas St	Planer Building	Northeast side of Planer Bldg	Air	Indoor	Stationary	Field Sample	N/A	2626	5/15/2001	0.004																UNK	0	0	
1R-04631		303 W. Thomas St	Planer Building	Northeast side of Planer Bldg	Air	Indoor	Stationary	Field Sample	N/A	2359	5/16/2001	0.003																UNK	0	0	< 0.00320
1R-04632		303 W. Thomas St	Planer Building	NA	Air	N/A	Personal	Field Blank	N/A		5/16/2001																	UNK	0	0	
1R-04485		303 W. Thomas St	Planer Building	Main work area	Air	Indoor	Stationary	Field Sample	N/A	2016	6/7/2001	0.002																UNK	0	0	< 0.00370
1R-04486		303 W. Thomas St	Planer Building	NA	Air	N/A	Stationary	Field Blank	N/A		6/7/2001																	UNK	0	0	
1R-06893		303 W. Thomas St	Property	Center of room	Air	Indoor	Stationary	Field Sample	N/A	1233	8/4/2001				0	0	0.00484	< 0.00484	0	0	0.00484	< 0.00484	0	0	0.00484	< 0.00484	UNK	0	0	< 0.00480	
1R-06894		303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		8/4/2001																	UNK	0	0	
1R-07101	Hepa vacuum	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	479	8/4/2001	0.012																UNK	0	0	< 0.00623
1R-07102	Hepa vacuum	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	480	8/4/2001	< 0.006																UNK	0	0	
1R-07104	Hepa vacuum	303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		8/4/2001																	UNK	0	0	< 0.00622
1R-07181		303 W. Thomas St	Property	Export plant	Air	Indoor	Stationary	Field Sample	N/A	1227	8/6/2001	0.003			0	0	0.00486	< 0.00486	0	0	0.00486	< 0.00486	0	0	0.00486	< 0.00486	UNK	0	0	< 0.00490	
1R-07183		303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		8/6/2001																	UNK	0	0	
1R-07381		303 W. Thomas St	Planer Building	Planer Bldg	Air	Indoor	Stationary	Field Sample	N/A	1242	8/7/2001	< 0.002			0	0	0.00481	< 0.00481	0	0	0.00481	< 0.00481	0	0	0.00481	< 0.00481	UNK	0	0	< 0.00480	
1R-07383		303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		8/7/2001				0	0			0	0			0	0				UNK	0	0	
1R-09059		303 W. Thomas St	EXP-2	EXP-2	Air	Outdoor	Stationary	Field Sample	N/A	3512	9/5/2001	0.001																UNK	0	0	
1R-09059		303 W. Thomas St	EXP-2	EXP-2	Air	Outdoor	Stationary	Field Sample	N/A	3512	9/5/2001	0.001																UNK	0	0	
1R-09060		303 W. Thomas St	WRGrace	EXP-3	Air	Outdoor	Stationary	Field Sample	N/A	3447	9/5/2001	0.001																UNK	0	0	
1R-09060		303 W. Thomas St	WRGrace	EXP-3	Air	Outdoor	Stationary	Field Sample	N/A	3447	9/5/2001	< 0.001																UNK	0	0	
1R-09081		303 W. Thomas St	EXP-4	EXP-4	Air	Outdoor	Stationary	Field Sample	N/A	3509	9/5/2001	0.002																UNK	0	0	
1R-09082		303 W. Thomas St	EXP-5	EXP-5	Air	Outdoor	Stationary	Field Sample	N/A	3192	9/5/2001	0.002																UNK	0	0	
1R-09082		303 W. Thomas St	EXP-5	EXP-5	Air	Outdoor	Stationary	Field Sample	N/A	3192	9/5/2001	0.001																UNK			



Sample ID	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=LY Area (dust=cm²)	Sample Date	PCM (METHOD - NIOSH 7400) Fibers/CC	Filter Status Non Analyzed	AHERA / ASTM 5755																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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1R-10099	Follow trucks	303 W Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/13/2001	0.13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															</

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Sample ID	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air/Ly Area (dust=cm <sup>2</sup> ))	Sample Date	PCM (METHOD - NIOSH 7400)	AHERA / ASTM 5755																				
													Fibers/CC	Filter Status Non Analyzed	Libby Amphiboles ( LA )			Chrysotile ( C )			Other Amphiboles ( OA )			Total Asbestos									
															S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	Asbestos Type Identified	S<5u	S>5u	Asb conc (Air = S/cc) or (Dust = S/cm <sup>2</sup> )			
1R-15883	Cleaning	303 W Thomas St	Building	Center west containment	Air	Indoor	Stationary	Field Sample	Clear	1260	10/11/2002							0.00474				0.00474										< 0.00474	
1R-15884		303 W Thomas St	Building	S E corner, West containment	Air	Indoor	Stationary	Field Sample	Clear	1260	10/11/2002							0.00474				0.00474										< 0.00474	
1R-15885		303 W Thomas St	Building	NW corner, West containment	Air	Indoor	Stationary	Field Sample	Clear	1260	10/11/2002							0.00474				0.00474										< 0.00474	
1R-15886		303 W Thomas St	Building	S.W. corner, West containment	Air	Indoor	Stationary	Field Sample	Clear	1229	10/11/2002							0.00474				0.00474										< 0.00474	
1R-15889	Cleaning	303 W Thomas St	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	362	10/11/2002							0.00486				0.00486										< 0.00486	
1R-15890		303 W Thomas St	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	10/11/2002	< 0.043																					< 0.00486
1R-15891		303 W Thomas St	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	166	10/11/2002	< 0.016																					< 0.00486
1R-15894		303 W Thomas St	Property	Makeup N planer building	Air	Outdoor	Stationary	Field Sample	N/A	1254	10/11/2002							0.00476				0.00476											< 0.00476
1R-15895	Cleaning	303 W Thomas St	Property	NAFU exhaust, West planer building	Air	Outdoor	Stationary	Field Sample	N/A	1326	10/11/2002							0.00450				0.00450											< 0.00450
1R-15896		303 W Thomas St	Property	NAFU exhaust, South planer building	Air	Outdoor	Stationary	Field Sample	N/A	1254	10/11/2002							0.00476				0.00476											< 0.00476
1R-15899		303 W Thomas St	Building	S E corner, Tool room	Air	Indoor	Stationary	Field Sample	Clear	1260	10/11/2002							0.00474				0.00474										< 0.00474	
1R-15900		303 W Thomas St	Building	Center tool room	Air	Indoor	Stationary	Field Sample	Clear	1260	10/11/2002							0.00474				0.00474										< 0.00474	
1R-15901	Cleaning	303 W Thomas St	Building	N E corner tool room	Air	Indoor	Stationary	Field Sample	Clear	1260	10/11/2002							0.00474				0.00474											< 0.00474
1R-15902		303 W Thomas St	Building	N W corner tool room	Air	Indoor	Stationary	Field Sample	Clear	1260	10/11/2002							0.00474				0.00474										< 0.00474	
1R-15903		303 W Thomas St	Building	S W corner tool room	Air	Indoor	Stationary	Field Sample	Clear	1260	10/11/2002							0.00474				0.00474										< 0.00474	
1R-15904		303 W Thomas St	Building	S W corner E. containment	Air	Indoor	Stationary	Field Sample	Clear	1260	10/12/2002							0.00474				0.00474											< 0.00474
1R-15905	Cleaning	303 W Thomas St	Building	S E corner E. containment	Air	Indoor	Stationary	Field Sample	Clear	1260	10/12/2002							0.00474				0.00474											< 0.00474
1R-15906		303 W Thomas St	Building	Center E. containment	Air	Indoor	Stationary	Field Sample	Clear	1260	10/12/2002							0.00474				0.00474										< 0.00474	
1R-15907		303 W Thomas St	Building	Center W. wall E. containment	Air	Indoor	Stationary	Field Sample	Clear	1260	10/12/2002							0.00474				0.00474										< 0.00474	
1R-15908		303 W Thomas St	Building	NE corner E. containment	Air	Indoor	Stationary	Field Sample	Clear	1260	10/12/2002							0.00474				0.00474											< 0.00474
1R-16249	Cleaning	303 W Thomas St	Property	North end	Air	Outdoor	Stationary	Field Sample - Grace	Pre	1249	10/22/2002	< 0.002						0.00478				0.00478											< 0.00478
1R-16250		303 W Thomas St	Property	North west end	Air	Outdoor	Stationary	Field Sample - Grace	Pre	1222	10/22/2002	< 0.002						0.00488				0.00488											< 0.00488
1R-16251		303 W Thomas St	Property	South west end	Air	Outdoor	Stationary	Field Sample - Grace	Pre	1241	10/22/2002	< 0.002						0.00481				0.00481											< 0.00481
1R-16252		303 W Thomas St	Property	South end	Air	Outdoor	Stationary	Field Sample - Grace	Pre	1267	10/22/2002	< 0.002						0.00471				0.00471											< 0.00471
1R-16253	Cleaning	303 W Thomas St	Property	South east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1238	10/22/2002	< 0.002						0.00482				0.00482											< 0.00482
1R-16254		303 W Thomas St	Property	North east end	Air	Outdoor	Stationary	Field Sample - Grace	Pre	1238	10/22/2002	< 0.002						0.00482				0.00482											< 0.00482
1R-16381		303 W Thomas St	Property	North end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	931	10/23/2002	< 0.004						0.00458				0.00458											< 0.00458
1R-16382		303 W Thomas St	Property	N W end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	929	10/23/2002	< 0.003						0.00459				0.00459											< 0.00459
1R-16383	Cleaning	303 W Thomas St	Property	Southwest end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	924	10/23/2002	< 0.003						0.00461				0.00461											< 0.00461
1R-16384		303 W Thomas St	Property	South end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	916	10/23/2002	< 0.003						0.00465				0.00465											< 0.00465
1R-16385		303 W Thomas St	Property	Southeast end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	913	10/23/2002	< 0.003						0.00467				0.00467											< 0.00467
1R-16386		303 W Thomas St	Property	Northeast end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	913	10/23/2002	< 0.003						0.00467				0.00467											< 0.00467
1R-16389	Cleaning	303 W Thomas St	Property	North end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1406	10/24/2002	< 0.002						0.00425				0.00425											< 0.00425
1R-16390		303 W Thomas St	Property	North west end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1411	10/24/2002	< 0.002						0.00423				0.00423											< 0.00423
1R-16391		303 W Thomas St	Property	South west end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1411	10/24/2002																						

Sample ID	Test	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=LY Area (dust=cm²))	Sample Date	AHERA / ASTM 5753																
												PCM (METHOD - NIOSH 7400)	Filter Status Non Analyzed	Libby Amphiboles ( LA )				Chrysotile ( C )				Other Amphiboles ( OA )				Total Asbestos		
														S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm²)	Asb conc (Air = S/cc) or (Dust = S/cm²)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm²)	Asb conc (Air = S/cc) or (Dust = S/cm²)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm²)	Asb conc (Air = S/cc) or (Dust = S/cm²)	Asbestos Type Identified	S<5u	S>5u
1R-16695		303 W. Thomas St	Property	South east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1259	11/5/2002	0.008					0.00474				0.00474				0	0	0	< 0.00474
1R-16696		303 W. Thomas St	Property	North east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1281	11/5/2002	0.008					0.00466				0.00466				0	0	0	< 0.00466
1R-16781		303 W. Thomas St	Property	North end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1344	11/6/2002	0.002			0	1	0.00444	0.01494			0.00444				0	1	0	0.01494
1R-16782		303 W. Thomas St	Property	North west end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1319	11/6/2002	< 0.002					0.00453				0.00453				0	0	0	< 0.00453
1R-16783		303 W. Thomas St	Property	South west end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1319	11/6/2002	< 0.002					0.00453				0.00453				0	0	0	< 0.00453
1R-16784		303 W. Thomas St	Property	South end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1311	11/6/2002	< 0.002					0.00455				0.00455				0	0	0	< 0.00455
1R-16785		303 W. Thomas St	Property	South east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1308	11/6/2002	< 0.002					0.00456				0.00456				0	0	0	< 0.00456
1R-16786		303 W. Thomas St	Property	North east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1308	11/6/2002	< 0.002					0.00456				0.00456				0	0	0	< 0.00456
1R-16787		303 W. Thomas St	Property	North end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	888	11/7/2002	0.004					0.00480				0.00480				0	0	0	< 0.00480
1R-16788		303 W. Thomas St	Property	North west end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1313	11/7/2002	< 0.002					0.00455				0.00455				0	0	0	< 0.00455
1R-16789		303 W. Thomas St	Property	South west end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1296	11/7/2002	0.003			1	0	0.00461	0.01549			0.00461				1	0	0	0.01549
1R-16790		303 W. Thomas St	Property	South end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1295	11/7/2002	< 0.002					0.00461				0.00461				0	0	0	< 0.00461
1R-16791		303 W. Thomas St	Property	South east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1313	11/7/2002	< 0.002					0.00455				0.00455				0	0	0	< 0.00455
1R-16792		303 W. Thomas St	Property	North east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1263	11/7/2002	< 0.002					0.00473				0.00473				0	0	0	< 0.00473
1R-16795		303 W. Thomas St	Property	North end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1349	11/8/2002	0.005					0.00442				0.00442				0	0	0	< 0.00442
1R-16796		303 W. Thomas St	Property	North west end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1347	11/8/2002	0.005					0.00443				0.00443				0	0	0	< 0.00443
1R-16797		303 W. Thomas St	Property	South west end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1344	11/8/2002	0.003					0.00444				0.00444				0	0	0	< 0.00444
1R-16798		303 W. Thomas St	Property	South end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1294	11/8/2002	0.005					0.00461				0.00461				0	0	0	< 0.00461
1R-16799		303 W. Thomas St	Property	South east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1344	11/8/2002	0.006					0.00444				0.00444				0	0	0	< 0.00444
1R-16800		303 W. Thomas St	Property	North east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1341	11/8/2002	0.004					0.00445				0.00445				0	0	0	< 0.00445
1R-16961		303 W. Thomas St	Property	North end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1255	11/9/2002	< 0.002					0.00476				0.00476				0	0	0	< 0.00476
1R-16962		303 W. Thomas St	Property	North west end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1250	11/9/2002	< 0.002					0.00478				0.00478				0	0	0	< 0.00478
1R-16963		303 W. Thomas St	Property	South west end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1247	11/9/2002	< 0.002					0.00479				0.00479				0	0	0	< 0.00479
1R-16964		303 W. Thomas St	Property	South end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1223	11/9/2002	< 0.002					0.00488				0.00488				0	0	0	< 0.00488
1R-16965		303 W. Thomas St	Property	South east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1247	11/9/2002	< 0.002					0.00479				0.00479				0	0	0	< 0.00479
1R-16966		303 W. Thomas St	Property	North east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1247	11/9/2002	< 0.002					0.00479				0.00479				0	0	0	< 0.00479
1R-16967		303 W. Thomas St	Property	North end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1244	11/11/2002	0.004					0.00480				0.00480				0	0	0	< 0.00480
1R-16968		303 W. Thomas St	Property	North west end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1275	11/11/2002	< 0.002					0.00468				0.00468				0	0	0	< 0.00468
1R-16969		303 W. Thomas St	Property	South west end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1282	11/11/2002	0.005					0.00466				0.00466				0	0	0	< 0.00466
1R-16970		303 W. Thomas St	Property	South end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1293	11/11/2002	0.003					0.00462				0.00462				0	0	0	< 0.00462
1R-16971		303 W. Thomas St	Property	South east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1318	11/11/2002	0.002					0.00453				0.00453				0	0	0	< 0.00453
1R-16972		303 W. Thomas St	Property	North east end	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1280	11/11/2002	< 0.002					0.00466				0.00466				0	0	0	< 0.00466
1R-16926		303 W. Thomas St	Property	South end of exclusion zone	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1280	11/12/2002	< 0.002					0.00466				0.00466				0	0	0	< 0.00466
1R-16927		303 W. Thomas St	Property	Southwest end of exclusion zone	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1280	11/12/2002	< 0.002					0.00466				0.00466				0	0	0	< 0.00466
1R-16928		303 W. Thomas St	Property	North east end of exclusion zone																								



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Sample ID	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=LY Area (dust=cm³)	Sample Date	PCM (METHOD - NIOSH 7400)	Fibers/CC	Filter Status Non Analyzed	Libby Amphiboles ( LA )					Chrysotile ( C )					Other Amphiboles ( OA )					Total Asbestos																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
															S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm³)	Aab conc (Air = S/cc) or (Dust = S/cm³)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm³)	Aab conc (Air = S/cc) or (Dust = S/cm³)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm³)	Aab conc (Air = S/cc) or (Dust = S/cm³)	Asbestos Type Identified	S<5u	S>5u	Aab conc (Air = S/cc) or (Dust = S/cm³)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
1R-17326		303 W Thomas St	Property	South Side of corridor	Air	Outdoor	Stationary	Field Sample - Grace	N/A	1269	11/23/2002	< 0.002																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								



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Sample ID	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=LY Area (dust=cm³)	Sample Date	PCM (METHOD - NIOSH 7400)	Fibers/CC	Filter Status Non Analyzed	Libby Amphiboles ( LA )				Chrysotile ( C )				Other Amphiboles ( OA )				Total Asbestos						
															S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm³)	Asb conc (Air = S/cc) or (Dust = S/cm³)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm³)	Asb conc (Air = S/cc) or (Dust = S/cm³)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm³)	Asb conc (Air = S/cc) or (Dust = S/cm³)	Asbestos Type Identified	S<5u	S>5u	Asb conc (Air = S/cc) or (Dust = S/cm³)			
1R-23485		Riverside Park	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/13/2003					0	0			0	0			0	0			0	0			0	0
1R-23486		Riverside Park	Property	W of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1561	10/14/2003					0	0.00	< 0.0047		0	0.00	< 0.0047		0	0.00	< 0.0047		0	0			< 0.0047	
1R-23487		Riverside Park	Property	SW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1410	10/14/2003					0	0.00	< 0.0042		0	0.00	< 0.0042		0	0.00	< 0.0042		0	0			< 0.0042	
1R-23488		Riverside Park	Property	SE of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1266	10/14/2003					0	0.00	< 0.0046		0	0.00	< 0.0046		0	0.00	< 0.0046		0	0			< 0.0046	
1R-23489		Riverside Park	Property	E of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1305	10/14/2003					0	0.00	< 0.0045		0	0.00	< 0.0045		0	0.00	< 0.0045		0	0			< 0.0045	
1R-23494		Riverside Park	Property	W of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1139	10/15/2003					0	0.00	< 0.0043		0	0.00	< 0.0043		0	0.00	< 0.0043		0	0			< 0.0043	
1R-23495		Riverside Park	Property	SW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1326	10/15/2003					0	0.00	< 0.0044		0	0.00	< 0.0044		0	0.00	< 0.0044		0	0			< 0.0044	
1R-23496		Riverside Park	Property	WSW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1325	10/15/2003					0	0.00	< 0.0044		0	0.00	< 0.0044		0	0.00	< 0.0044		0	0			< 0.0044	
1R-23497		Riverside Park	Property	SE of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1319	10/15/2003					0	0.00	< 0.0045		0	0.00	< 0.0045		0	0.00	< 0.0045		0	0			< 0.0045	
1R-23666		Riverside Park	Property	W of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1352	10/16/2003					0	0.00	< 0.0044		0	0.00	< 0.0044		0	0.00	< 0.0044		0	0			< 0.0044	
1R-23667		Riverside Park	Property	SW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1235	10/16/2003					0	0.00	< 0.0048		0	0.00	< 0.0048		0	0.00	< 0.0048		0	0			< 0.0048	
1R-23668		Riverside Park	Property	W SW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1278	10/16/2003					0	0.00	< 0.0046		0	0.00	< 0.0046		0	0.00	< 0.0046		0	0			< 0.0046	
1R-23669		Riverside Park	Property	SE of EZ	Air	Outdoor	Stationary	Field Sample	N/A	988	10/16/2003					0	0.00	< 0.0043		0	0.00	< 0.0043		0	0.00	< 0.0043		0	0			< 0.0043	
1R-23670		Riverside Park	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/16/2003					0	0			0	0			0	0			0	0			0	0
1R-23585		Riverside Park	Property	SW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1422	10/17/2003					0	0.00	< 0.0041		0	0.00	< 0.0041		0	0.00	< 0.0041		0	0			< 0.0041	
1R-23590		Riverside Park	Property	W of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1084	10/17/2003					0	0.00	< 0.0045		0	0.00	< 0.0045		0	0.00	< 0.0045		0	0			< 0.0045	
1R-23591		Riverside Park	Property	SE of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1422	10/17/2003					0	0.00	< 0.0041		0	0.00	< 0.0041		0	0.00	< 0.0041		0	0			< 0.0041	
1R-23592		Riverside Park	Property	E of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1422	10/17/2003					0	0.00	< 0.0041		0	0.00	< 0.0041		0	0.00	< 0.0041		0	0			< 0.0041	
1R-23679		Riverside Park	Property	W of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1347	10/20/2003					0	0.00	< 0.0044		0	0.00	< 0.0044		0	0.00	< 0.0044		0	0			< 0.0044	
1R-23680		Riverside Park	Property	SW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1334	10/20/2003					0	0.00	< 0.0044		0	0.00	< 0.0044		0	0.00	< 0.0044		0	0			< 0.0044	
1R-23681		Riverside Park	Property	WSW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1336	10/20/2003					0	0.00	< 0.0044		0	0.00	< 0.0044		0	0.00	< 0.0044		0	0			< 0.0044	
1R-23682		Riverside Park	Property	SE of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1304	10/20/2003					0	0.00	< 0.0045		0	0.00	< 0.0045		0	0.00	< 0.0045		0	0			< 0.0045	
1R-23685	Laborer	Riverside Park	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	218	10/20/2003	0.015																					
1R-23686	Level D Truck Driver	Riverside Park	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	204	10/20/2003	0.041																					
1R-23688	Level D Truck Driver	Riverside Park	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	62	10/20/2003	0.12																					
1R-23689	Level D Truck Driver	Riverside Park	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	171	10/20/2003	0.067																					
1R-23690	Laborer	Riverside Park	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	202	10/20/2003	< 0.013																					
1R-23691	Level D Truck Driver	Riverside Park	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	66	10/20/2003	< 0.041																					
1R-23692		Riverside Park	Property	W of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1267	10/21/2003					0	0.00	< 0.0046		0	0.00	< 0.0046		0	0.00	< 0.0046		0	0			< 0.0046	
1R-23693		Riverside Park	Property	SW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1250	10/21/2003					0	0.00	< 0.0047		0	0.00	< 0.0047		0	0.00	< 0.0047		0	0			< 0.0047	
1R-23694		Riverside Park	Property	WSW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1242	10/21/2003					0	0.00	< 0.0047		0	0.00	< 0.0047		0	0.00								

Sample ID	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=L) Area (dust=cm²)	Sample Date	PCM (METHOD - NIOSH 7400)	AHERA / ASTM 5755																	
													Fibers/CC	Filter Status Non Analyzed	Libby Amphiboles ( LA )				Chrysotile ( C )				Other Amphiboles ( OA )				Total Asbestos			
															S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm³)	Asb conc (Air = S/cc) or (Dust = S/cm³)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm³)	Asb conc (Air = S/cc) or (Dust = S/cm³)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm³)	Asb conc (Air = S/cc) or (Dust = S/cm³)	Asbestos Type Identified	S<5u	S>5u	Asb conc (Air = S/cc) or (Dust = S/cm³)
1R-24271		Riverside Park	Property	N of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1467	11/13/2003			0	0	0.00	< 0.0040	0	0.00	< 0.0040	0	0.00	< 0.0040	0	0.00	< 0.0040		0	0	< 0.0040
1R-24272		Riverside Park	Property	E of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1467	11/13/2003			0	0	0.00	< 0.0040	0	0.00	< 0.0040	0	0.00	< 0.0040	0	0.00	< 0.0040		0	0	< 0.0040

**Appendix B**  
**Asbestos Sampling Results for Fill Material**  
**Used at Operable Unit 1**

**Appendix B - Asbestos Sampling Results for Fill Material Used at Operable Unit 1**

Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

Sample ID	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Sample Date	PLM			
								Method	LA Bin	LA (%)	C (%)
1R-02683	Plum Creek Pit	Property	Plum Creek Pit	Soil-Like	Fill	Field Sample	10/10/2000	PLM-9002	A	ND	ND
1R-14476	Plum Creek Pit	Borrow Source	Borrow source	Soil-Like	Fill	Field Sample	9/4/2002	PLM-9002	A	ND	ND
1R-14477	Plum Creek Pit	Borrow Source	Borrow source	Soil-Like	Fill	Field Sample	9/4/2002	PLM-9002	A	ND	ND
1R-14478	Plum Creek Pit	Borrow Source	Borrow source	Soil-Like	Fill	Field Sample	9/4/2002	PLM-9002	A	ND	ND
1R-14479	Plum Creek Pit	Borrow Source	Borrow source	Soil-Like	Fill	Field Sample	9/4/2002	PLM-9002	A	ND	ND
1R-14480	Plum Creek Pit	Borrow Source	Borrow source	Soil-Like	Fill	Field Sample	9/4/2002	PLM-9002	A	ND	ND
1R-21981-B	Boothman Pit	Borrow Source	Boothman fill pit, 9000 to 12000 cu yds	Soil-Like	Fill	Field Sample	7/30/2003	PLM-9002	A	ND	ND
1R-21358-B	Boothman Pit	Borrow Source	Boothman Fill Pit; 12,000 to 15,000 cu yds	Soil-Like	Fill	Field Sample	7/30/2003	PLM-9002	A	ND	ND
1R-21359-B	Boothman Pit	Borrow Source	Boothman fill pit; 15,000 to 18,000 cu. yds	Soil-Like	Fill	Field Sample	7/30/2003	PLM-9002	A	ND	ND
1R-21360-B	Boothman Pit	Borrow Source	Boothman fill pit; 18,000 to 21,000 cu. yds	Soil-Like	Fill	Field Sample	7/30/2003	PLM-9002	A	ND	ND

**Appendix C**  
**Libby Superfund Site Lot Blank Data**  
**as of April 27, 2007**

**Note:** The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

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## Appendix C - Libby Superfund Site Lot Blank Data as of April 27, 2007

Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

Sample ID	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=Ly Area (dust=cm <sup>3</sup> ))	Sample Date	PCM (METHOD - NIOSH 7400)		AHERA / ASTM 5755																	
												Fibers/CC	Filter Status Non Analyzed	Libby Amphiboles ( LA )				Chrysotile ( C )				Other Amphiboles ( OA )				Total Asbestos					
														S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	Asbestos Type Identified	S<5u	S>5u	Asb conc (Air = S/cc) or (Dust = S/cm <sup>3</sup> )			
1R-04564	Hepa vacuum	303 W. Thomas St	Planer Building	NA	Air	N/A	Personal	Field Blank	N/A		5/9/2001																UNK	0	0		
1R-04579		303 W. Thomas St	Planer Building	NA	Air	N/A	Stationary	Field Blank	N/A		5/10/2001																UNK	0	0		
1R-04609		303 W. Thomas St	Planer Building	NA	Air	N/A	Personal	Field Blank	N/A		5/14/2001																UNK	0	0		
1R-04632		303 W. Thomas St	Planer Building	NA	Air	N/A	Personal	Field Blank	N/A		5/16/2001																UNK	0	0		
1R-04486		303 W. Thomas St	Planer Building	NA	Air	N/A	Stationary	Field Blank	N/A		6/7/2001																UNK	0	0		
1R-06894		303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		8/4/2001																UNK	0	0		
1R-07104			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		8/4/2001															UNK	0	0		
1R-07183			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		8/6/2001			0	0			0	0			0	0				UNK	0	0	< 0.00622
1R-07383			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		8/7/2001			0	0			0	0			0	0				UNK	0	0	
1R-10026			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		9/7/2001																UNK	0	0	
1R-10087			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		9/10/2001																UNK	0	0	
1R-10148			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		9/11/2001		0														UNK	0	0	< 0
1R-10149			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/11/2001		0														UNK	0	0	
1R-10154			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/11/2001																UNK	0	0	
1R-10165			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		9/12/2001																UNK	0	0	
1R-10168			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/12/2001																UNK	0	0	
1R-10094			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		9/13/2001		0														UNK	0	0	
1R-10095			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/13/2001		0														UNK	0	0	
1R-10099			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/13/2001																UNK	0	0	
1R-10118			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/14/2001																UNK	0	0	
1R-10553			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/17/2001																UNK	0	0	
1R-10565			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/18/2001																UNK	0	0	
1R-10662			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/19/2001																UNK	0	0	
1R-10676			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/20/2001																UNK	0	0	
1R-10690			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/21/2001																UNK	0	0	
1R-10724			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/22/2001																UNK	0	0	
1R-10740			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/24/2001																UNK	0	0	
1R-10756			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/25/2001																UNK	0	0	
1R-11213			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/26/2001																UNK	0	0	
1R-11228			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/27/2001																UNK	0	0	
1R-11264			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/28/2001																UNK	0	0	
1R-11280			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/29/2001																UNK	0	0	
1R-11480			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/1/2001																UNK	0	0	
1R-11499			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/2/2001																UNK	0	0	
1R-11515			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/3/2001																UNK	0	0	
1R-11531			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/4/2001																UNK	0	0	
1R-11584			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/5/2001																UNK	0	0	
1R-11641			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/8/2001																UNK	0	0	
1R-11656			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/9/2001																UNK	0	0	
1R-11631			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/10/2001																UNK	0	0	
1R-10800			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		10/12/2001																UNK	0	0	
1R-08939			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		10/17/2001																UNK	0	0	
1R-10828			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		10/17/2001																UNK	0	0	
1R-12253			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		10/18/2001																UNK	0	0	
1R-10842			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/19/2001																UNK	0	0	
1R-10851			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		10/20/2001																UNK	0	0	
1R-10870			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/23/2001																UNK	0	0	
1R-12724			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		10/24/2001																UNK	0	0	
1R-12757			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		10/25/2001																UNK	0	0	
1R-12288			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		11/1/2001																UNK	0	0	
1R-12762			303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		11/2/2001																UNK	0	0	
1R-12773			303 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		11/3/2001																			



**Appendix D**  
**OU1 Field Blank Data as of April 27, 2007**

**Note:** The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

Server-Database: \\204.47.48.36\Libby2

**Note:** The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

**AHERA / ASTM 5755**

Server-Database: \\204.47.48.36\Libby2

Server-Database: \\204.47.48.36\Libby2

Sample ID	Scenario	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=L) Area (dust=cm²)	Sample Date	PCM (METHOD - NIOSH 7400)		AHERA / ASTM 5755																		
													Fibers/CC	Filter Status Non Analyzed	Libby Amphiboles (LA)				Chrysotile (C)				Other Amphiboles (OA)				Total Asbestos						
															S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm²)	Asb conc (Air = S/cc) or (Dust = S/cm²)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm²)	Asb conc (Air = S/cc) or (Dust = S/cm²)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm²)	Asb conc (Air = S/cc) or (Dust = S/cm²)	Asbestos Type Identified	S<5u	S>5u	Asb conc (Air = S/cc) or (Dust = S/cm²)			
1R-21293	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		6/27/2003																			0	0	
1R-21294	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		6/27/2003																			0	0	
1R-21295	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		6/27/2003																			0	0	
1R-21296	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		6/27/2003																			0	0	
1R-21297	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		6/27/2003																			0	0	
1R-24836	N/A		NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0			0	0			0	0							0	0	
1R-24837	N/A		NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0			0	0			0	0							0	0	
1R-24838	N/A		NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0			0	0			0	0							0	0	
1R-24839	N/A		NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0			0	0			0	0							0	0	
1R-24840	N/A		NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0			0	0			0	0							0	0	
1R-24841	N/A		NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0			0	0			0	0							0	0	
1R-24842	N/A		NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0			0	0			0	0							0	0	
1R-24843	N/A		NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0			0	0			0	0							0	0	
1R-24844	N/A		NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0			0	0			0	0							0	0	
1R-24845	N/A		NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0			0	0			0	0							0	0	
1R-25200	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0			0	0			0	0							0	0	
1R-25201	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0			0	0			0	0							0	0	
1R-25202	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0			0	0			0	0							0	0	
1R-25203	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0			0	0			0	0							0	0	
1R-25204	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0			0	0			0	0							0	0	
1R-25205	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0			0	0			0	0							0	0	
1R-25206	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0			0	0			0	0							0	0	
1R-25207	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0			0	0			0	0							0	0	
1R-25208	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0			0	0			0	0							0	0	
1R-25209	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0			0	0			0	0							0	0	
1R-25747	N/A		NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0			0	0			0	0							0	0	
1R-25748	N/A		NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0			0	0			0	0							0	0	
1R-25749	N/A		NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0			0	0			0	0							0	0	
1R-25750	N/A		NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0			0	0			0	0							0	0	
1R-25751	N/A		NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0			0	0			0	0							0	0	
1R-25752	N/A		NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0			0	0			0	0							0	0	
1R-25753	N/A		NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0			0	0			0	0							0	0	
1R-25754	N/A		NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0			0	0			0	0							0	0	
1R-25755	N/A		NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0			0	0			0	0							0	0	
1R-25756	N/A		NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0			0	0			0	0							0	0	
1R-26080	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		8/10/2004			0	0			0	0			0	0							0	0	
1R-26081	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		8/10/2004			0	0			0	0			0	0							0	0	
1R-26082	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		8/10/2004			0	0			0	0			0	0							0	0	
1R-26083	N/A		NA	Blank	Blank	Air	N																										



Sample ID	Scenario	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=LJ/ Area (dust=cm²)	Sample Date	PCM (METHOD - NIOSH 7400)		AHERA / ASTM 5755															
													Fibers/CC	Filter Status Non Analyzed	Libby Amphiboles (LA)				Chrysotile (C)				Other Amphiboles (OA)				Total Asbestos			
															S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm³)	Asb conc (Air = S/cc) or (Dust = S/cm³)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm³)	Asb conc (Air = S/cc) or (Dust = S/cm³)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm³)	Asb conc (Air = S/cc) or (Dust = S/cm³)	Asbestos Type Identified	S<5u	S>5u	Asb conc (Air = S/cc) or (Dust = S/cm³)
1R-28084	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		11/3/2004			0	0			0	0			0	0			0	0		
1R-28085	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		11/3/2004			0	0			0	0			0	0			0	0		
1R-28086	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		11/3/2004			0	0			0	0			0	0			0	0		
1R-28087	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		11/3/2004			0	0			0	0			0	0			0	0		
1R-28088	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		11/3/2004			0	0			0	0			0	0			0	0		
1R-29309	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29310	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29311	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29312	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29313	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29314	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29315	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29316	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29317	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29318	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29319	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29320	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29321	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29322	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29323	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29324	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29325	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29326	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29327	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-29328	N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005			0	0			0	0			0	0			0	0		
1R-30268	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006			0	0			0	0			0	0			0	0		
1R-30392	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30393	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30394	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30395	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30396	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30397	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30398	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30399	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30400	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30401	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30402	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30403	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30404	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30405	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005			0	0			0	0			0	0			0	0		
1R-30406	N																													



Sample ID	Scenario	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=LY Area (dust=cm <sup>3</sup> ))	Sample Date	PCM (METHOD - NIOSH 7400)		AHERA / ASTM 5755																							
													Fibers/CC	Filter Status Non Analyzed	Libby Amphiboles (LA)				Chrysotile (C)		Other Amphiboles (OA)				Total Asbestos													
															S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>3</sup> )	Asbestos Type Identified	S<5u	S>5u	Asb conc (Air = S/cc) or (Dust = S/cm <sup>3</sup> )								
1R-32614	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		8/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-32615	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		8/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-32616	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		8/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-32617	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		8/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-32618	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		8/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-32619	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		8/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33518	N/A		NA	Blank	NA	Air	N/A	Personal	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33519	N/A		NA	Blank	Blank	Air	N/A	Personal	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33731	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33732	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33733	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33805	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33806	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33807	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33808	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33809	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33810	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33811	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33812	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33813	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33814	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33815	N/A		NA	Blank	Blank	Air	N/A		Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33816	N/A		NA	Blank	Blank	Air	N/A		Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33817	N/A		NA	Blank	Blank	Air	N/A		Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33818	N/A		NA	Blank	Blank	Air	N/A		Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-33819	N/A		NA	Blank	Blank	Air	N/A		Lot Blank	N/A		10/4/2005			0	0			0	0			0	0			0	0			0	0			0	0		
1R-34018	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006			0	0			0	0			0	0			0	0			0	0			0	0		
1R-34017	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006			0	0			0	0			0	0			0	0			0	0			0	0		
1R-34018	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006			0	0			0	0			0	0			0	0			0	0			0	0		
1R-34019	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006			0	0			0	0			0	0			0	0			0	0			0	0		
1R-34275	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006			0	0			0	0			0	0			0	0			0	0			0	0		
1R-34276	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006			0	0			0	0			0	0			0	0			0	0			0	0		
1R-34277	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006			0	0			0	0			0	0			0	0			0	0			0	0		
1R-34278	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006			0	0			0	0			0	0			0	0			0	0			0	0		
1R-34279	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006			0	0			0	0			0	0			0	0			0	0			0	0		
1R-34794	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		</																										

Sample ID	Scenario	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air-L) Area (dust=cm²)	Sample Date	PCM (METHOD - NIOSH 7400)		AHERA / ASTM 5755																	
													Fibers/CC	Filter Status Non Analyzed	Libby Amphiboles (LA)				Chrysotile (C)				Other Amphiboles (OA)				Total Asbestos					
															S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm²)	Asb conc (Air = S/cc) or (Dust = S/cm²)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm²)	Asb conc (Air = S/cc) or (Dust = S/cm²)	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm²)	Asb conc (Air = S/cc) or (Dust = S/cm²)	Asbestos Type Identified	S<5u	S>5u	Asb conc (Air = S/cc) or (Dust = S/cm²)		
1R-38662	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38663	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38664	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38665	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38666	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38667	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38668	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38669	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38670	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38671	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38672	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38673	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38674	N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38675	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38676	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38677	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
1R-38678	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			0	0			0	0			0	0				
CS-16435	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		11/6/2003			0	0			0	0			0	0			0	0		0		
CS-16436	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A	0	11/6/2003			0	0			0	0			0	0			0	0		0		
CS-17461	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17462	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17463	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17464	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17465	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17466	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17467	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17468	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17469	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17470	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17471	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17472	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17473	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17474	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17475	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-17476	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0			0	0			0	0			0	0				
CS-18917	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		2/26/2004			0	0			0	0			0	0			0	0				
CS-18918	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		2/26/2004			0	0			0	0			0	0			0	0				
1R-04659	N/A		Rainy Creek Rd	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		5/12/2001														UNK		0	0			
1R-04660	N/A		Rainy Creek Rd	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		5/12/2001														UNK		0	0			

**Appendix E**  
**Equipment Blank Data as of April 27, 2007**

**Appendix E - Equipment Blank Data as of April 27, 2007**

**Note:** The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

Sample ID	Parent ID	Scenario	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	PLM			
										Method	LA Bin	LA (%)	C (%)
CS-16697-FG		N/A	NA	Blank	NA	Soil-Like	Soil	Equipment Blank	9/9/2003	PLM-VE	A	ND	ND
CS-16822-FG		N/A	NA	Blank	NA	Soil-Like	Soil	Equipment Blank	9/10/2003	PLM-VE	A	ND	ND
CS-16847-FG		N/A	NA	Blank	NA	Soil-Like	Soil	Equipment Blank	9/12/2003	PLM-VE	A	ND	ND
CS-16863-FG		N/A	NA	Blank	NA	Soil-Like	Soil	Equipment Blank	9/13/2003	PLM-VE	A	ND	ND

**Appendix F**  
**Previously Released EPA-approved**  
**Site Work Plans and Summary Reports**  
**(produced by the Volpe Center and CDM)**

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**Appendix F will be included in the final version of this document.**